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N^o 1. Ring Bone

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|---|------------------------------|
| 2. <i>Dangerous Splint</i> | 8. <i>Bone Spavin</i> |
| 3. <i>Splint of little Danger</i> | 9. <i>Thorough Pin</i> |
| 4. <i>Splint frequently troublesome</i> | 10. <i>Curb</i> |
| 5. <i>Perfect Foot showing the seat of Corn</i> | 11. <i>Blood Spavin</i> |
| 6. <i>Corn</i> | 12. <i>An Imperfect Foot</i> |
| 7. <i>Seton under the Eye</i> | 13. <i>Quittor</i> |

CASES
IN
FARRIERY;
IN WHICH THE
DISEASES OF HORSES
ARE TREATED ON THE PRINCIPLES
OF THE
VETERINARY SCHOOL
OF
MEDICINE.

BY

JOHN SHIPP,

LATE VETERINARY SURGEON TO THE ELEVENTH, AND NOW TO THE TWENTY THIRD
REGIMENT OF LIGHT DRAGOONS.

LEEDS:

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[1806]

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BY

JOHN SMITH

LATE VETERINARY SURGEON TO THE REGIMENT, AND NOW TO THE REGIMENT OF LIGHT DRAGOONS

LONDON

PRINTED BY ROBERT SMITH, FOR THE AUTHOR, AND SOLD BY LONGMAN AND CO. PATERNOSTER-ROW, AND BARNARD, BARNARD, AND CO. ST. MARTIN'S LANE, LONDON. 1841.



Advertisement.

THE scientific and learned Reader will readily perceive, that no regular Arrangement, or Methodical Classification of Diseases, has been studiously observed in the Performance now before him ; yet the Author trusts, that as the Contents of the Volume were sent to the Press in detached Parts, during his Absence on Regimental Duty, he may hope to obtain some indulgence ; and that the Sincerity of his Intentions, though often expressed in a plain unlettered Style, may disarm the Critic, and plead his Excuse.

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DEDICATION.

TO EDWARD COLEMAN, ESQ.

PROFESSOR OF THE SCIENCE OF VETERINARIAN MEDICINE, AND VETERINARY SURGEON-GENERAL
TO HIS MAJESTY'S TROOPS OF CAVALRY, AND THE HONOURABLE BOARD OF
ORDNANCE, &c. &c.

SIR,

IF the distinguished eminence you have attained, and the office you have so long filled with honour to yourself, and benefit to your country, did not point out a peculiar propriety in my dedicating the following pages to you, I should have been influenced by the still stronger motives of affection, and the sense of duty I owe to you as the Professor under whose guidance and direction I first imbibed the rudiments and principles of the Veterinary Art. And, altho' I am conscious, that the present work can have no other claim to your notice, than as a tribute of profound respect, and unfeigned gratitude, yet, if it should receive your approbation and patronage as the first fruits of my endeavours to render myself useful in my station, it would inspire me with a small degree of confidence and hope that my labour has not been altogether in vain.

I also wish, at the same time, to express my obligations, in common with Veterinarian Surgeons in general, and the community at large, to Dr. Baillie, Messrs. Cline, Cooper, Abernethy, Home, &c. who have so amply merited praise and gratitude for their noble and disinterested assiduities, attention and instruction, communicated to the Veterinary Collegians, and for whom, I trust, I shall ever retain the most grateful feelings of regard.

I remain, dear Sir,

With the sincerest wishes for your prosperity and happiness,

Your much obliged and most obedient humble Servant,

JOHN SHIPP,

Veterinary Surgeon to the 11th and 23d Regiments of Light Dragoons.

Leeds, July 3d, 1806. }

PREFACE.

ALTHO, from the first establishment of the Veterinary College, much interesting information on the Treatment and Diseases of Horses, has continued to issue from the press, and has deservedly obtained both credit and celebrity; yet, as the author of the following pages has had the honour of being the first Veterinary Surgeon appointed to one of his Majesty's regular regiments of Cavalry, it has afforded him such an extensive field of observation and enquiry as may not, perhaps, have fallen to the lot of many others. And as his practice has happily met the approbation of those who have employed him in his public capacity, as well as of a numerous class of gentlemen and others who have consulted him in the line of his profession, he candidly acknowledges that he has been induced, at the earnest solicitation of these, to offer the present short detail of facts to the eye of an impartial public, hoping for its kind indulgence.

In a work of this sort, where the path has been often occupied by the footsteps of others, a coincidence of sentiment must sometimes occur, and afford a corroborative proof that the mode of practice recommended by the Veterinarian School is daily establishing itself on the firm basis of experience.

I am

I am also induced to hope, that my feeble attempts at instruction may have a tendency to excite, in some degree, the feelings of humanity, in respect to the many sufferings which the generous animal, for which I am concerned, is frequently liable from unmerited cruelty and injudicious treatment; and that mankind may be induced to view these sufferings with an eye of sympathy and tenderness, and have recourse to rational practitioners when disease, or accident require relief.

Veterinarians labour under much greater difficulties than Physicians and Surgeons, as the faculty of speech seldom fails to assist the endeavours of the latter, and to lead to the discovery of the seat of the disease, or malady, while the former are directed by the simple symptoms only. If the Physician alleviate sickness or pain he gains credit, but if we fail in our attempts to render a lame horse perfectly sound, we rarely give satisfaction.

The Veterinary Art is still in its infancy, as Surgery was a century or two ago, yet many great and solid improvements have been made in it, not only in discovering the causes and seats of diseases in the Horse, but in preventing and removing them, and particularly in the treatment and management of his feet, and the disorders brought on by improper shoeing.

Corns, contracted and convex feet, now admit of a radical cure. Inflammation of the lungs, (which if neglected in the incipient state, is soon succeeded by a dropy of the chest) and many other acute diseases, which, if not relieved in a few hours, become fatal, are successfully treated by the new practice, as well as quotidian, tertians, and quartans, to which the horse is liable. The farcy, which, till lately, was dreaded as the plague, and said to be contagious,
and

and fatal, wherever it made its attack, has at last proved to be neither contagious, nor fatal, when properly and judiciously treated.

The Jaundice, or Yellows, a disease which has so frequently baffled the old practitioners, and which to this day, the Farriers persist in the opinion that it is infectious, but which I beg leave positively to deny, is so far from being fatal, that it admits of an easy remedy.

That dreadful disease, vulgarly called the Canker in the foot, is now removed without having recourse to the cruelest of all operations, that of drawing the sole.

His Royal Highness, the Commander in Chief, fully impressed with a sense of the rationality and success of the Veterinary Practice, and of the modes adopted for preventing diseases, particularly in the feet of horses, and of the usefulness of free ventilation, in stables, &c. ; has signified his high approbation by offering a more ample remuneration to the Veterinary Surgeons in the army.

Empericism, and the private interest of individuals, have tended greatly to retard the more general adoption and progress of the regular Veterinarian ; even the reputation of the College has suffered by false prejudices and misrepresentations ; no wonder then that the Veterinary Surgeon should meet with similar treatment, and perverse opposition, from common Farriers and empirical practitioners ; yet we cherish a hope, that truth, supported by facts, will ultimately prevail, to the full establishment of rational practice, in which humanity and tenderness are blended with judgment, directed by experience.

INTRODUCTION.

IT is my design to point out the most eligible mode of Shoeing Horses, both as it respects the *sound*, and *diseased* hoof, and particularly that method which has come more immediately under my own superintendence and care ; also to specify the most essential parts of the *insensible* hoof, designed for the protection of the *sensible* ; with the size of the nails most proper in shoeing, and where they ought to be placed : with cautions against, and consequences of, applying hot shoes to the feet, by way of fitting the hoof to the shoe, instead the shoe to the hoof. Also to offer a few hints respecting the application of cow's dung to the feet ; and the injuries sustained by such practice, with the method I have usually employed in treating the diseases occasioned by it. It is likewise my intention to give an anatomical description of the foot, with the structure, economy and diseases of each part of it separately, in as explicit a manner as possible.

FARRIERY.

A Perfect Foot described.

IT can scarcely have escaped the observation of gentlemen and others, when viewing the basis, or bottom of the horse's foot, that the naturally healthy foot approaches nearly to the form of a circle; so that a straight line drawn from the inside to the outside of the heel ought to be as long as a line drawn from the heel to the toe; and by whatever means this circular form is altered, it must prove injurious to the foot.

Since the erroneous ideas of Farriers have so long prevailed, in continuing the practice of cutting away the very essential parts of the hoof formed for a defence against external injuries, and preservatives against the diseases which are daily occasioned by the removal of them, to the great disadvantage of thousands in the army, as well as of great numbers of Horses employed for private use. It appears to be a duty incumbent on every Veterinary Surgeon to suppress such a deleterious and detestable practice. It is not, however, my design to
bring

bring reproach on others, but rather to instruct those who may unfortunately be unacquainted with the symptoms of diseases in general, and to remove their doubts, particularly on subjects of importance. I have, therefore, arranged my practice into *cases*; each case numbered, that the reader may, at one view, see the symptoms of the disease, with the treatment of it immediately following; and lastly, the *causes* fully explained so far as they have been ascertained by all the assiduity, attention, and observation in my power to bestow; together with the success of my practice in each instance. It may be proper, first to hint, that the shoeing of horses is a work of art, and by no means the design of nature; in many countries, to this day, no shoes have ever been worn; to this fact I have been a witness, in a variety of instances. Two sisters of the name of Dover, at Kimble-Wick, in Buckinghamshire, who followed the farming business, kept six or seven horses, three of which were never shod; two of them were six or seven years old, and one of them fifteen or sixteen; they have done all the necessary work on the farm, repeatedly going to market, and other places, with corn, &c. &c. without suffering the least inconvenience from it. These horses, I have often observed, have feet as circular as a colt's, or as that natural hoof which has never undergone any change. Upon inquiry I found that the old horse's feet were always *circular*, and expanded at the heels, and perfectly sound. And on examining the sole, it appeared to be very thick, compact, and flat, the bars parallel with the frog; and remarkably thick and strong; the frog more expanded than nature formed it; hard and tough, the sole equally strong, hard, and thick enough to resist any offending body, so that altogether they formed nearly one parallel flat surface, of that dense, compact texture that never required shoes through life.

The feet of the young horses were also as perfect and compact as those
of

of the old horse, and as well formed for durability ; had never been in the least tender ; nature having always supplied them with a growth of hoof equal to the consumption ; the farmer had often occasion to rasp down the heels parallel with the toes, the consumption at the latter being greater than at the heels ; and was frequently obliged to rasp the external edges of the hoof to preserve them from breaking when they became brittle by standing too long in the stable upon dry straw, &c.

The fact that a great number of horses pass through life, without shoes, is too well known to require any repetition. Every horse which I have had an opportunity of examining, after he had gone several years without shoes, had his feet as circular as a colt's, or as when first formed by nature.

Surely there requires no stronger evidence to prove, that contracted feet are the immediate offspring of imprudence, and the absurd work of art unattended by science, and forbidden by all the laws of nature.

What can possibly tend more to illustrate the above-mentioned absurdity than seeing these horses undergo daily labour and fatigue, without either lameness, deformity in their feet, or any inconvenience whatever ; whilst those that are repeatedly shod, and have their frogs, bars and soles cut away by unguarded farriers, can scarcely stand with one foot bare whilst they are fixing the shoe upon the other, without danger of falling down upon their knees. This every one must have observed who has been accustomed to see horses shod.

What remains to be said respecting the foot, relates to the preservation of it,

it, therefore a description of the parts which compose it, together with their uses, may be advantageous as well as acceptable to my readers.

This work might perhaps have appeared more elegant, and have been better received, had I laid down the structure of the foot, and its component parts, in technical terms; at the same time it would have saved me much writing, and been somewhat more accurate, but I must beg leave to add, that, that mode of expressing myself, in describing such an important part as the foot of a horse, would neither have answered my design nor the purpose of those who are unacquainted with the anatomical, and technical terms; for this reason, I trust, the work will prove of more general use, by my explaining the structure and economy of the different parts that compose the foot in as explicit and intelligible a manner as the nature of the subject will admit.

1st, It may not be improper to begin with describing the internal contents of the hoof, in order to illustrate more clearly the structure of the whole foot, and the shorter the explanation is, the better impression it will make on the mind.

The internal part of the hoof is composed of ARTERIES, VEINS, NERVES, LIGAMENTS, TENDONS, LAMINATED SUBSTANCES, and FROG, these compose the *sensible* contents of the foot.

2dly, The box, or external crust or wall of the foot, the SOLE, BARS and FROG, with the INSENSIBLE LAMINA, the CORONARY or HORNY RING.

These

These are the principal parts of the external and insensible contents of the foot, to be separately described hereafter.

3dly, There still remains to be mentioned, three bones and two cartilages that make part of the composition of the foot, viz. The **SMALL** or **LOWER PASTERN BONE**, one end only of which enters the internal part of the foot.

The second is the **COFFIN BONE**, the upper surface of which forms an irregular concavity for the reception of the inferior (*i. e.*) the lower end of the small pastern bone. The coffin bone is conical, resembling the hoof, and is extremely vascular, (*i. e.*) more blood vessels are, I believe, sent through this bone, than through all the bones in the whole horse.

It is concave at the bottom, to correspond with the sole, to grasp the ground, and for the reception of the flexor tendon of that muscle which bends the leg, and a portion of the sensible frog.

Innumerable arteries pass through this bone for the nourishment of all the internal parts of the foot, the sensible frog excepted, which is nourished by branches of arteries sent from the two large arteries, running on each side of the flexor tendon in the fetlock joint, and at their termination forming a complete network of veins, covering the whole external surface of the coffin bone, (that part excepted which is covered by a portion of the frog) and the insertion of the tendon of the flexor muscles of the leg, and the concavity for the reception of the lower end of the small pastern bone, so that the foot altogether is the most vascular of any organ in the whole body of the horse, the kidneys excepted.

4thly,

4thly, The third and last bone is the NAVICULAR or NAVICULARE, so called from its likeness to a boat, situated in the cavity of the heel of the coffin bone, as if it were designed by nature to act as a prop, to keep expanded the two points of the bone of the heel, and it would occasionally, from its situation, answer that immediate purpose, were there any power of contraction employed sufficient to do away the resistance of the coffin bone itself.

Over this bone passes the tendon of the flexor muscle of the leg to be inserted into the bottom and concave part of the coffin bone, and at the same time to perform the office of a Lever to the tendon, and enable the muscle to make a more rapid and powerful spring. This would appear more evident had I time to give a description of these parts on plates, to shew the mechanical structure and powers of them ; as I cannot, I beg leave to refer my readers to that beautiful and valuable work of Mr. Coleman, on the structure and œconomy of the foot of the horse.

5th, The cartilages of the foot are of a triangular form, one situated on the upper edge of each hind quarter of the coffin bone, near that part which is within the hoof, each of them occupies a semicircular space of about two inches above the top of the hoof on each heel, which may be felt by employing a little pressure upon the upper part of the heels, called the quarters, by which pressure any one may, who has the least knowledge of the cartilages and their texture, determine whether they are in a perfect state, or become ossified.

The cartilages situated on these parts are very wise provisions of nature, for if the heels of the coffin had been completed with bone, of the same thickness

ness that it is with cartilage, it would have been subject to fracture from the nature of their daily employment.

But it may be asked, why these cartilages are not as much subject to fracture, when ossified from disease, &c. as if they had been so formed by nature at first? We may answer, that the Maker of all things has as wisely altered the form of the cartilages, when become ossified, to prevent fractures, &c. as he first finishes the coffin bone with cartilages for the greater convenience to the animal, without being subject to fracture, which is evidently so, and every one who has seen an ossified cartilage, and another in its natural, healthy state, forming or completing the upper and hind parts of the coffin bone, may very easily perceive that it is nature's determination not to leave her work unfinished, or undefended; and though diseases have changed its flexible texture to a brittle one, still she interferes, and alters the usual breadth and thickness, contracting the cartilage, which before occupied a triangular space of two or three inches, into the space, in many cases, of not more than one inch and half high, and thick in proportion.

That part of the cartilage which is lost by being contracted, is mostly that portion which projects above the hoof; and the part inserted into the coffin bone is safely protected by the hoof.

One very evident use of cartilages in these parts not yet mentioned, is to take off or prevent the pressure of hoof upon the blood vessels, when compressed by external bodies, disease, or deformity; as a great number of blood-vessels are distributed all over the external surface of the cartilages; which are flexible on pressure. If they had not been so formed by nature, and the blood vessels thus
upon

distributed upon their external surface, the mischief of cutting away the sole, bar and frog, would have been much greater than it is, for as the heels contracted, they would have acted as a compress upon the blood vessels, distributed upon the cartilages, and would have rendered them all impervious; but, as I before mentioned, nature has wisely formed flexible bodies for the distribution of blood vessels in those parts, which must otherwise have suffered great inconvenience by exposure to external injuries, which may be better understood by examining the foot of a Horse, with all the blood vessels injected.

Having described the bones and cartilages, with their uses and functions, and also hinted that there is *sensible* as well as *insensible* Lamina, I shall proceed to the *sensible* with its mutual connexion with the *insensible*.

Any person who has observed the lower or concave surface of a mushroom, is at once able to judge what sort of an appearance the laminated substance of a Horse's foot exhibits. For there is no one thing in nature that so nearly resembles it, as may be proved, when the hoof is detached. At one view the whole external surface of the coffin bone, (*i. e.*) the front and quarters, may be seen completely covered with the laminated substance, resembling, as before observed, the concave surface of a mushroom, when situated in a perpendicular direction from the coronet to the toe; the whole of the concave surface, or basis of the coffin bone, is also plentifully supplied with these laminæ, the space excepted which is occupied by the sensible frog, and the insertion of the tendon of the flexor muscles before described. These laminæ appear to be a continuation of those distributed all over the front and quarter, but are much finer or smaller, and are continued towards the frog in an oblique direction, diminishing in size as they approach it, and lastly terminate in a small surface

surface entering the sides of the sensible frog. These laminæ are about five or six hundred in number in a horse's foot. Between each of them there is a space (as may be seen in those of the mushroom) to receive the same number of insensible laminæ, which are firmly attached to the internal surface of the hoof, to be hereafter described. These sensible and insensible laminæ receive each other into their spaces, similar to the teeth of a rat-trap, strongly embracing each other. By their contractile power they answer the purpose of a ligament, and articulate the insensible hoof to the sensible foot. And though small, yet being numerous, and of a very tough, strong, elastic texture, they are equal to the office of keeping the horse completely suspended on his hoofs, without resting his weight upon his soles, and this prevents concussion.

The truth of this testimony is unimpeachable, from the frequent opportunities which occur of making observations of this nature, in Horses affected with inflammation in their feet, viz. that they cannot support themselves as long as any inflammation subsists in the laminated substance. This is not because the soles or bones are unable to bear the weight of the animal, but because the sensible laminæ are rendered more susceptible of impression, from the inflammation, and when a Horse, in this situation, is driven beyond his abilities, the sensible and insensible laminæ will lose their union. I have seen, in several instances, a hoof completely detached from excessive inflammation in the feet. Surely there cannot require any other demonstration of a proper distinction to be made between sensible and insensible laminæ.

Sensible

Sensible Frog.

THE Sensible Frog is of the same form as the insensible, only somewhat less elastic, very vascular, and susceptible of external injury. It is situated immediately under (and is smaller than) the insensible. It receives two branches of arteries for its nourishment, &c. from the two large arteries running by the sides of the tendons before-mentioned, which supply all the other internal parts of the foot, and these arteries terminate in small veins distributed over its own external surface, after which, they all unite into two, towards the heel, and enter the two large veins, which convey the blood forwards to the heart. The insensible frog is concave in the middle, to receive the convex part of the sensible, by which means they very powerfully embrace each other, and prevent dislocation.

Nerves.

THE Nerves of the foot are a continuation of what are termed radiales, about the size of a small wheat straw, running on each side of the tendon of the flexor muscle, and pursue the same direction till they reach the small bone, called the navicular, under which they pass, that they may enter the coffin bone through two small apertures, formed for their reception, after which they divide into innumerable branches, and pass through the coffin bone, again subdividing into imperceptible ramifications, to give sensibility to the foot. A technical description of the nerves would perhaps have been more accurate, but it would have been too intricate for those who are not acquainted with anatomy.

Tendons.

Tendons.

THERE are two large tendons in the composition of a horse's foot, which are continuations of the extensor, and flexor muscles of the leg.

The extensor is inserted into the superior or upper edge of the coffin bone, at which insertion, and about two inches upwards, it is more expanded than in any other part, by way of forming a ligament, to what is termed the coffin joint.

The flexor is inserted into the basis and concave part of the coffin bone, equally expanded at its insertion, which expansion is continued over the navicular before-mentioned.

These Tendons are composed of white, hard, and tough elastic fibres, firmly connected together by a small portion of cellular substance. They do not all appear to have entered the foot, for the purpose of completing the form of it only, but for the purpose of facilitating the mechanical powers, there being no muscles in the composition of a horse's foot, which are the chief instruments of motion in every other part of the body.

Ligaments.

Ligaments.

THERE are also ligaments in the composition of the foot, which are close, compact, fibrous substances, for the purpose of articulating the bones together, and forming a cap to retain the synovia (or what is generally, and particularly amongst Farriers, termed joint oil) within the joint, designed for lubricating, and facilitating its motion. For a more perfect and better understanding these parts of the internal foot, I would recommend my readers to the perusal of Mr. COLEMAN's observations on its structure, economy and diseases, who has given very accurate demonstrations of the foot on plates.

Arteries.

Arteries.

THERE are some few arteries not yet mentioned, which make part of the composition of the foot, called the superior and inferior coronary arteries. The superior appears from its being situated round the coronet, whence its name, and giving off a great number of small branches designed to perform the office of secreting the horny matter for the formation of the horny or coronary ring, the horny hoof in general, and the insensible laminated substances.

The inferior is situated immediately upon the lower edge, and whole circumference of the coffin bone, giving off a great number of small branches, seemingly for the purpose of secreting the sensible laminæ of the sole, &c.

I presume that an accurate description of the internal or sensible bars, and their connexions with the sensible sole, without plates, would be intricate, as it requires an accurate anatomical knowledge of the foot, to form the least idea of them; from their minuteness and situation, they cannot be demonstrated explicitly without the nicest dissection.

Hoof.

Hoof.

Having described the internal contents of the foot of a horse, with their functions, I presume that a brief explanation of the external parts will be quite sufficient, as every person must be in some degree acquainted with its form, contents, and office.

It cannot have escaped the eye of any one, that the hoof of a horse is of a conical form.

It is composed of a number of compact, horny, elastic fibres, much smaller in diameter at the top than the bottom ; and its basis or bottom when in its natural form, approaches nearly to a circle, so that a line drawn from heel to heel, is as long as a line drawn from the heel to the toe, which every person may see by examining the foot of a colt, which has never been shod. But trust not to the foot of any horse that has ever been shod, for the perfect form of a foot is from its Maker. The very first instrument that is employed to the foot, by the Farriers, viz. the butteris, tends to pervert the work of nature, by cutting away the bars, frog, and sole, which are mutually subservient to the expansion of the hoof, the form of which cannot be well understood when those parts are cut away.

Sole.

Sole.

THE sole is a composition of horny fibres, somewhat more elastic than the fibres of the external hoof, and forms the whole basis of the foot, (the space occupied by the frog, and the thickness of the crust excepted,) it is about half an inch thick, and is firmly articulated to the sensible sole, by the laminated substance.

The sole appears to be in some measure formed to keep the hoof expanded, especially at the heels, to defend the sensible sole, and the sensible contents under it, as well as to act as a spring to the foot when in action, and by its concavity to embrace the ground, and give a more firm step to the horse.

Frog.

Frog.

THE frog is a very powerful, elastic, compact substance, occupying a triangular space in the bottom of the foot, from the centre to the heel, one angle, with the bars, forms that part of the bottom of the foot called the heel. A healthy frog projects up parallel with the external edges of the crust, keeps the heel expanded, and acts as a spring in motion, and prevents the horse from slipping.

Bars.

Bars.

THE bars are two in number, composed of compact, horny fibres, situated in an oblique direction from the heel, on each side of the frog, between that and the external crust, and terminate in forming a part of the sole at the point of the frog, to keep the heels expanded, leaving a space of about half an inch broad between them and the external crust, which is somewhat more brittle than the rest of the sole. This space is the seat of a corn, let the cause be what it may.

Having finished the description of the sensible and insensible parts of the foot of a horse, with their functions, &c. I shall next endeavour to explain the diseases, how they are so frequently produced by cutting away those parts of the foot most subservient and essential to its protection and offices.

1st, Then I shall endeavour to prove, that whatever alters the natural form of the foot, produces disease, (*i. e.*) the effect of that alteration which may properly be called the cause of the disease. It is easily proved, by examining such feet as have never had their bars and frogs cut away; and comparing them with those which have been repeatedly cut by the Farrier, that unskilful treatment has been the principal cause of most of the diseases incident to the foot of the Horse.

2dly,

2dly, That corns are produced by preffure of the shoe, or bruise, upon that space between the bars and crust specified in the description of the bars. Any person at all acquainted with the situation of the bars, (independent of the profession) may be convinced, that if they were not cut away, but kept prominent and parallel with the external crust at the heel, and that space between them hollowed out with a drawing knife, each time of shoeing, no such improper preffure could take place; as I am well assured, that by a strict perseverance in shoeing, according to the principles laid down in this treatise, a horse would never have a corn, and the most inveterate corn would be radically cured by the same practice.

3dly, That cutting away the bar exposes that part between it and the crust to preffure; the heel of the crust, at the same time, being cut too close to the sensible parts, exposes it still more to external injury.

1st, By a thick heeled shoe being placed nearly flat upon the sole.

2dly, By gravel and small stones working under the shoe, and adding to the preffure. This could not happen, were not the bars cut away.

Cankers and running Thrushes are also the immediate effects of paring down the sole, bars, and frog, which will appear under their proper heads.

That corns are produced by preffure, &c. is evident. The bars and heels of the sole being previously cut away, the thick heeled shoe employed upon the remainder of the then insensible sole, contiguous to the sensible, produces

duces inflammation. Sometimes it happens, that the blood vessels become impervious from pressure, applied in the above manner; sometimes the inflammation proceeds to suppuration and abscess, forming matter between the sensible and insensible sole, still retaining (to my surprize) the appellation of a corn. Corns in common, appear to be no more than a small portion of the external sole, placed between the bar and crust, first appearing red, which is the chief symptom that leads to the discovery of the disease, as many horses are lame from bruises, and from thick shoes, &c. the parts when but recently bruised, exhibit no appearance of corns, but inflammation remains for some days. Farriers attempt to remove the inflammation without removing the cause, which being impossible, they say the horse is strained in the coffin joint, he is accordingly bled at the toe, fired and blistered upon the coronet, and is frequently obliged to undergo the most cruel of all operations, that of drawing the sole.

The redness before-mentioned, I believe to proceed from the violence of the pressure upon the thin external sole, rupturing some of the small blood vessels; and the extravasation of blood tinges the insensible sole in contact with them, and soon discovers itself externally.

There are also soft corns incident to horses' feet, but there is no difference in the cause of the two, (*i. e.*) the hard and soft corn, for both are produced by bruises or pressure upon the same part, and put on the same external appearance, at first altering in colour and consistence, from changes in temperature and treatment, (*i. e.*) the removing a horse from a hot, dry stable, to a cold wet one; turning him into a straw yard, where there is much wet dung; or into wet marshy ground. Such chances will alter both the appearance, and consistence of a corn. But when soft corns are found in horses' feet,

when

when standing in a dry stable, I believe they proceed from inflammation of the sensible sole, or the sensible laminated substance which keeps the soles of some feet in a state of perspiration, wisely ordained to get rid of the existing inflammation ; so that not only the corn itself, but the frog, and sole, are much softer than in the feet of those horses in which hard corns exist. Those feet called by Farriers pummy feet, are most subject to soft corns, which appear to be more susceptible of bruises and pressure, from their form, than hard or concave feet, and in these the corn is always the softest part of the sole, as is the case also where corns are found in hard feet.

TREATMENT

TREATMENT

OF

CORNS.

HAVING finished my observations on the production and appearance of corns, I shall next shew my indication and most approved method of cure. If matter be formed, and the laminated substance diseased, or destroyed by the formation of matter, I invariably dress the corn, or stimulate the growth of new laminæ, by dropping a few drops of Tincture of Myrrh and Aloes upon the seat of the disease; the old external hoof, or the space between the bar and crust, being previously cut away down to the sensible laminæ.

If the laminated substance be not diseased, or destroyed, as above-mentioned, removing the cause will remove the disease. That is, by taking off the shoe, paring the corn down to the sensible laminated substance, between the bar and crust, leaving the bar prominent for the heel of the shoe to rest upon, with the same equal pressure as upon the crust, and immersing the foot two or three times a day, for three or four days together, in warm water, will be quite sufficient to remove the painful effects of the corn; and if the bars are high enough to form a parallel surface at the heel, with the crust, the horse may

may be shod with the common long shoe, and perform his usual office. If the bar be cut away too low to admit of a bearing of the heel of the shoe, a bar shoe should be employed, with the parts covering the seat of the corn hollowed, to take off the bearing from the quarters, and cause the part covering the frog to come in close contact with it, and let the nails be placed round the toe, and none in the quarters.

By this mode of shoeing, in one month, the bars will grow high enough for the heel of the long shoe to have a bearing equal with the crust. The bars being perfect, and the space between them hollowed out, each time of shoeing, to prevent future pressure, will be a certain preventive of corns in the feet. When I first joined the 11th Light Dragoons, a great number of the horses were tender or lame, from corns, the Farriers not being acquainted with the Veterinary mode of preparing feet for shoeing, all which I treated as before-mentioned, viz. by taking off the shoes, immersing the feet in warm water, to promote a growth of the bars, to relieve the inflammation of the feet, and to soften the seat of the hard corns. When matter was formed, I dressed the parts with the tincture as above, and employed the shoes before described with general success; and though there were nearly seven hundred horses in the regiment, I had not the care of a corn for two or three years afterwards. Indeed the disease is so simple, that it requires little or no surgical treatment; and if gentlemen would take the trouble of procuring a natural hoof prepared with the bars, sole, and frog perfect, they would see the cavity, or seat of the corn, and by insisting on the bars being preserved when their horses were shod, they might prevent them from ever having corns.

Case.

Case 1.

CORNS are so common to all sorts of horses, after having been shod, that they require no description ; I shall therefore only briefly inform my readers, that they are situated between the external crust of the heel and the bar, tinge the part of the sole with blood, in the feat of them, extravasated from the small blood vessels of the sensible sole. The cause of corns in the feet of horses, is the same as that in the human toe, namely, the pressure of the shoe ; but the corn itself bears no similarity—that in the horse is a disease in the sensible sole, discriminated by inflammation, extravasation, and frequently suppuration ; in the human toe the disease is generally in the skin only, a corn is the simplest disease to cure of any incident to the horse, it commonly yields to paring away, at different times, with a drawing knife, all the part that is discoloured, leaving the bar and crust projecting a little above its surface, every time the horse is shod ; hollowing out the space between the bar and crust, which not only removes the corn, but if persevered in, will prove a sure preventive in future ; including accidental causes, I have not had fourteen cases of corns in the 11th Light Dragoons for seven years together ; and they have never required any other treatment than the specified alteration in shoeing. The first case I met with of any importance, was in a horse the property of Captain Barratt, who had just before bought him of a gentleman who had tried every means he could hear of, but to no purpose, and he was sold chiefly on that account ; the pressure had excited a violent inflammation, which had terminated in suppuration, leaving all the feat of the corn to the sensible sole hollow,

hollow, and diseased ; the horse was not able to bear any sort of shoe ; the other heel had also an incipient corn, and was a little inflamed ; to get rid of which, I caused his feet to stand in warm water two or three hours a day, for three or four days ; the inflammation being abated, I discontinued the water, and pared away the incipient corn, nearly to the sole, leaving the bar as prominent as the state of the heel would admit ; the part of the sole in the seat of the other corn, from the action of the warm water, was brought into a more proper state for its being removed ; which being done, with a fine drawing knife, I dropped six or eight drops of Tincture of Myrrh into the cavity, night and morning, for five or six days, at which time there were granulations projecting and forming sensible sole, apparently quite as prominent as it ought to be ; I then discontinued the use of the tincture, and applied dry tow pressed down into the hole, which gave a firm surface to the granulations, or sensible sole ; and, in a few days, an insensible surface was formed over it ; in about ten days the horse was shod with the common long heeled shoe, in which he went, without shewing any symptoms of lameness. Mr. Barratt had the horse in his possession two or three months afterwards, and then sold him perfectly sound. Some people allow two sorts of corns, the hard and soft, they are both one and the same, the hard is the first stage of inflammation in the parts, the soft is the termination of inflammation, in pus or matter, or a predisposition to abscess or ulceration ; absorption succeeds, and the parts are destroyed and carried away in a fluid state. I once saw a case in which nearly the whole bottom of the foot was equally inflamed, but was softer in the seat of the corn than in any other part ; the bars were entirely cut away, but the seat of the corn was more prominent than the external crust, so that the shoe lodged upon the seat of the Corn ; I reduced the seat of the corn to the sensible sole, and applied tips, in which the horse was turned out for a few weeks, in a soft, marshy field ; in consequence

of

of the violent inflammation, it was very desirable to have had his feet put into warm water, but that being impracticable, he was turned out; I visited him again, and, to my astonishment, found almost every symptom of inflammation and redness in the sole, and feat of the corn removed; at a second visit I pared away the corn, and ordered seated shoes to be made, but not to be put on till the horse had stood a few days longer without, in order to give pressure to the convex sole.—I was informed in about a month afterwards, that he was at work, and not the worse for having had corns. When any considerable inflammation exists, it is best to immerse the feet in warm water, three or four hours a day, till it abate, in which time, the bars, which are generally cut away, will be growing up level with the external crust.

Case 2.

THIS horse was the property of Mr. Clark, at the Bell Inn, Barnby-Moor, Nottingham; he was a valuable post horse, but Mr. Clark had nearly lost the use of him in consequence of corns; hearing that I was at Doncaster, he called to request I would go and look at him, and on examining his feet, I found four of the worst corns I had ever seen in my practice; the sole was so completely convex, that when the shoe was taken off, and the foot put upon a level surface, the external crust did not even come in contact with the ground, wanting about the fifth of an inch to bring it upon a level with the sole; however, I found that the sole would bear reducing nearly to a level with the crust, without any material injury, which I accordingly did; and finding the

the corns occupying nearly three times the space which they do in common, attended by violent inflammation, and forenefs, infomuch, that the animal could not bear the preffure of my finger upon the feat of corn; the bars were entirely cut away. I ordered the horfe to be turned out into a foft, marfhy field, and fhod in tips for two or three weeks; when I again vifited him, to my furprize, found every fymptom of inflammation and rednefs in the feat of the corn removed; I pared away the corns, and very flight fymptoms could be perceived of their exiftence, I ordered him fome feated fhoes, but not to be put on, till he had flood a few days longer without, in order to give preffure to the convex fole. I was informed about a month afterwards, that the horfe was at work, and had fuffered no very material detriment.

Case 3.

THIS horfe was the property of the Rev. Afcough Hawkfworth, of Hickleton-Hall, in Yorkfhire. I obferved that the corns in the infide heels were much worfe than the outfide, which generally is occafioned by greater preffure being applied to the former, than to the latter; and that is the refult of turning up the outfide heel, which throws the centre of gravity upon the infide quarter; the bars, at the fame time, which is very unufual, were very good, therefore, it appeared that thefe corns were occafioned merely by neglect of not leaving the feat of them concave, fo that the preffure upon that part might be equal to that upon the bar and cruft. I have no other caufe to assign, why a horfe fhould have corns, when the bars and cruft are equally prominent

prominent and healthy ; I pared them out with a fine drawing knife, as deep as was convenient, without cutting the sensible sole ; he was turned out to graze for about ten days, after which I repeated the operation, and was able to cut away nearly the whole of the corn, and he was again turned out. I paid him a visit about twelve days after, and found but trifling appearances of corn. Mr. H. informed me four months afterwards, that they were completely eradicated.

Case 4.

FRANCIS HAWKSWORTH, Esq. had a chesnut horse, at the same time, which had corns, nearly as bad as the preceding ; he was treated in the same manner, and perfectly cured.

Case 5.

A Horse the property of William Prest, Esq. Leeds, had corns cured by a few times paring out, in the same way that Mr. Hawksworth's were.

Case

Sandcrack.

A SANDCRACK originates from neglect, being generally occasioned by treads, &c. upon the coronet, at which part the horny fibres of the crust are divided; and as it grows down towards the toe, the gravel, &c. not being properly taken out every time the horse comes in from a journey, works through the insensible crust, to the sensible laminated substance, producing inflammation, which frequently terminates in suppuration, or abscess, commonly called a quittor.

A Sandcrack sometimes proceeds from a natural disposition in the horny crust to crack, when the horse stands a long time together in too hot a stable, without exercise.

Sandcracks occasioned by such neglect, are sometimes met with in a transverse direction to the horny fibres, but one caused by a cut, &c. runs in a direction with the horny fibres, and by gravel working into the crack, it reaches the sensible laminæ, and produces disease. If the seat of the disease be in the centre of the horny hoof, forming matter, it mostly makes its way up to the coronet before it shews any disposition to vent itself, unless an aperture be artificially made in the horny crust, for its outlet.

I have seen many instances of sandcracks produced by too long nails
being

being driven into the hoof. This sort of sandcrack is generally worse to cure than either of the former, for this reason, that the crack mostly reaches nearly down to the toe, which has its portion of the weight of the body upon it, keeping it in a state of expansion, by which the horny fibres are divided, and actually so separated, as frequently to prevent their union, until the crack has made its way up to the coronet, without producing any disease in the foot, or any inconvenience to the horse. If this sort of crack should be occasioned by one of the nails being driven into the quarters or heel, and it should make its way up to the coronet, the consequence is much worse than when it takes place near the toe, for the union is then more difficult to effect, in consequence of the weakness of the crust at the heel; and when it happens to the fore foot, the consequence is still greater than in the hind foot, in the same situation, by reason of a greater portion of weight being thrown upon the heels of the horse's fore feet, when in action, than on the hind feet, which not only prevents the union of the divided horny fibres, but also exposes them to bruises, &c. the effect of which is sometimes very alarming, producing a quitor, and frequently a false quarter. Such are the causes, appearances, and consequences, of what are termed Sandcracks.

The next thing I shall consider, will be how to prevent sandcracks, as prevention must be more advantageous to the owner of a horse than a cure.

1st, That sort of sandcrack which proceeds from heat, as before-mentioned, may be easily prevented by keeping the stable clear of hot burning dung, and of an uniform, moderate heat, directing the horse's feet to be well washed and cleared of gravel, &c. If the hoofs should have acquired a hard, brittle texture,

texture, from frequent exposure to heat, let the horse's feet stand, for a week or two, in a shallow tub, in which there is some clay, reduced with water to the consistence of thick cream, which will retrieve the lost elasticity of the horny fibres.

Secondly, That sandcrack which is occasioned by too large nails being driven into the hoofs in shoeing, may be easily prevented, by using nails of a smaller size, as directed at page 46.

That sort of sandcrack occasioned by cuts, &c. upon the coronet, admits of an easy cure, by a little care, in avoiding spirituous tinctures, oils, balsams, ointments, &c. and bringing the lips of the wound in contact, by means of a needle and thread, uniting them with adhesive plaister, or compress and bandage.

All these modes of uniting the lips of the wound should be performed during the bleeding state. If the accident happen upon a journey, and the blood should have stopped, and gravel, or dirt, has worked into the wound, it may be washed out with warm water, and rubbed dry with a linen cloth; after that operation, sufficient friction should be used with a dry cloth, or the finger, to excite fresh bleeding; in which state, close up the wound as before-mentioned.

This mode of treatment will, in most cases, prevent the hoof from being materially injured. I have lately had several cases of this nature, in which the coronet had been cut through very deeply, but having speedily completed a union of the parts divided, they never affected the hoof farther than leaving a
small

small scar or seam, about an inch long from the hair, without any division of horny fibres. This has been my treatment invariably in recent cases of this nature, and generally with success in this sort of sandcrack.

The sandcrack occasioned by too large nails being driven into the hoof in shoeing, requires quite a different treatment; if the crack be in the toe, or near it, the usual shoe may be employed, only with smaller nails; and two small nails should be placed one on each side of the crack, within a quarter of an inch of it, making the two ends of the cracked, horny crust into two fixed points by the nails, which will prevent any farther division of the horny fibres upwards. If the division of the horny fibres does not extend to the sensible laminated substance, there will not be required any other treatment to effect a cure, and if the laminated substance should be affected by the crack, thereby producing inflammation, or matter, the foot should be made to stand in water of the heat of 108 degrees of Fahrenheit's thermometer, about six hours a day, till the inflammation is relieved, and the hoof sufficiently softened to be easily cut away for discharging the matter, &c. if there be any. In these cases, about the sixth of an inch above the crack, the edge of a hot iron made in the form of a chisel, should be applied in a transverse direction, with the horny fibres, or crack, till it burns its way through the insensible hoof, to the sensible laminated substance, care being taken not to burn the laminæ if possible.

The mode of burning the horny crust in a transverse direction of the crack, as above, will prevent the crack extending any farther, at the same time stimulate the growth of new horny fibres to fill up the crack. When it is occasioned by the bigness of the nails, as before-mentioned, and neglected, it will make its way up to the coronet, leaving the hoof split from top to bottom.

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The same thing will occur if the hoof at the heel be split by the same means, and both are very troublesome to unite, or cure, as they require a long time, and much rest to effect it.

The best method of forming an union, that I have been able to learn, in these divided horny fibres, is that of drawing the crack with a fine drawing knife, as wide at the inside or bottom of the crack next the sensible laminæ, as the external edges are from each other ; then with a hot iron, made to fit the crack, burn the bottom, the whole length of it, by lightly drawing the edge of the firing iron upon the crack, till it slightly burns the sensible laminated substance, without burning the edges of the crack on either side ; this being carefully executed, will stimulate the arteries, particularly about the coronet, to throw out more than the usual quantity of blood for the formation of new horny fibres, to fill up the opening. A few days after the firing iron has been applied, equal quantities of Tar and Linseed Oil being poured boiling hot into the crack, two or three times a day, will promote a much greater growth of hoof, and restore the lost elasticity of the horny fibres in a shorter time than nature of herself can accomplish.

This, with due rest, is all that is requisite to effect a cure of this sort of fanderack ; unless through neglect, gravel should be forced in between the sensible and insensible laminæ, in different directions, which I have repeatedly experienced ; and in such cases I have been obliged to follow the gravel, &c. by cutting the hoof away in every direction, where I found any extraneous substances introduced ; till I could extract every particle ; after which I dressed the section or wound with the boiling hot Tar and Linseed Oil as before-mentioned, which will effect a more speedy cure than any application I have

have ever seen in my practice. But let me admonish my readers to employ an early remedy, as delay is sometimes of great importance. Any of the above described sandcracks, may terminate in false quarters, quittors, and frequently cankers in the foot.

The best method of forming an union, that I have been able to learn, in these divided horny fibres, is that of drawing the crack with a fine drawing knife, as wide at the inside or bottom of the crack near the sensible lamina, as the external edges are from each other; then with a hot iron, made to fit the crack, burn the bottom, the whole length of it by lightly drawing the edge of the thing iron upon the crack, till it slightly burns the sensible laminaed substance, without burning the edge of the crack on either side; this being carefully executed, will terminate the matter, particularly about the coronet, to draw out more than the usual quantity of blood for the formation of new horny fibres to fill up the opening. A few days after the thing iron has been applied, equal quantities of Tar and Linseed Oil being poured boiling hot into the crack, two or three times a day, will promote a much greater growth of horn, and restore the lost elasticity of the horny fibres in a shorter time than nature of itself can accomplish.

Thus with due care, is all that is requisite to effect a cure of a sandcrack; and though nature might be forward in between the sensible and insensible lamina, in different directions, which I have repeatedly experienced; and in such case I have been obliged to follow the gravel, &c. by cutting the hoof away in every direction, where I found any extensive substances introduced; till I could extend every particle of matter which I directed the section or wound with the boiling hot Tar and Linseed Oil as the fire-iron, which will effect a more speedy cure than any application I have

CANKER

CANKER

IN THE

FEET.

THE characteristic of a canker is a fetid, putrid state of the foot, occasioned by an ichorous, corrosive discharge from a diseased frog; or a termination of inflammation of the sensible frog, and sensible, laminated substance, &c. mostly brought on by contracted heels. Whenever this disease becomes inveterate, it is attended with a loss of the whole frog; part of the sole next to the heel; and frequently the whole of the sensible, laminated substance placed under the horny crust at the heels; the bone itself also diseased, so that the practitioner is obliged to cut away both quarters, or heels, before he can apply a proper remedy.

Case 1.

THE following was the case of a canker in a horse's foot, belonging to Mrs. Tudor, at the Crown Inn, Reading, Berkshire, which had been under a
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Farrier's care three or four months previous to my being called in. Upon examining the foot, I found that all the frog was gone, either by disease, or some other cause; and the whole of the external crust or hoof, from one quarter, and all the sole from the bottom of the same quarter; the bone was exposed for about five inches in circumference, (which arose from the disease) and was become as black as ink; the laminated substance for an inch further round the diseased bone, and the remaining laminae were in a state of high inflammation, assuming the appearance of a piece of fungous flesh, projecting full three parts of an inch above its usual height.

As the horse was unable to bear any part of his weight upon the diseased foot, Mrs. Tudor consulted me, according to her own declaration, upon the expediency of attempting a cure, or of immediately putting the poor animal out of his misery, as there appeared so little probability of his ever becoming useful again, judging from the present aspect of the disease.

As I did not think it a lost case, but that it appeared to require different treatment, I was requested to take it under my care, though not without some hesitation, as the horse had already been very expensive to the owner, she could not afford to give much for the cure upon an uncertainty. In consideration of her loss, &c. I assented to undertake the cure for two guineas, which was, in truth, worth ten, upon the terms of no cure no pay; to which Mrs. Tudor agreed. After carefully examining the diseased foot, next morning, I acquainted Mrs. T. there was a great probability of restoring the horse to his labour. She was, however, still undetermined whether to destroy him or not, he had been so expensive to her; but, as this was a very rare and bad case, I wished much to have the management of it, accordingly, for the small gratuity

gratuity before-mentioned. I began to treat him in the following manner. The unhealthy appearance of the bone ; the projection of superfluous, sensible, laminated substance resembling flesh, with the fetidness of the foot, altogether indicating a desperate disease, induced me to apply a more powerful dressing than I am usually accustomed to do, viz.

Common Turpentine, half a pound,	} well mixed.
Spirits of Turpentine, half a pint,	
Powdered Euphorbium, three ounces,	
Corrosive Sublimate, one ounce ;	

I dressed the foot with an ounce of the mixture, made boiling hot, night and morning, for a week ; cutting away part of the diseased, superfluous flesh, and then binding it well with tow, &c. The corrosive, stimulating qualities of this dressing soon caused the unhealthy part of the bone to exfoliate ; the apparent fungous flesh completely sloughed off, the fetid discharge ceased ; the foot began to put on a healthy appearance, and in a short time, nothing was wanting to complete the cure, but a growth of hoof, and the other parts that had been destroyed by the disease ; which parts I dressed every day with the following liniment, made warm, viz :—

Oil of Turpentine, four ounces,
 Oil of Linseed, eight ounces,
 Ointment of Elder, six ounces,
 Bees' wax, two ounces ;

All well mixed over a slow fire. I applied this liniment about a month, when

I directed

I directed a light shoe to be put on the foot, and the horse turned into a straw yard for six or eight weeks; in which time the hoof was sufficiently grown to bear a common shoe, as usual. I advised Mrs. Tudor to take him up, and work him, which she did for several weeks before I left Reading.

Happening to be quartered in that town, two years afterwards, I made inquiry after the horse, and was informed, that he was perfectly sound.

REMARKS.

Had not the disease extended to the quarters, or heels, and destroyed them, as well as the frog, and sole, strong Tincture of Myrrh and Aloes, with a small quantity of Tincture of Euphorbium, or powdered Euphorbium mixed with it, would have been a better dressing to have stimulated the growth of the laminated substance, after using the caustic liniment; but in these cases, in which there is a loss of hoof, all spirituous Tinctures, applied to the parts, tend to harden, dry, and contract the growing, horny fibres upon their sensible contents.

On this account, oleaginous mixtures are preferable to spirituous Tinctures, &c. The sensible laminated substance projecting above its usual height, forming fungus, &c. should never be destroyed by a hot iron, nor hot oils, such as Oil of Vitrol, &c. as they not only destroy the superfluous parts, but render impervious the blood vessels, which by nature are formed for the conveyance of blood to the external surface of the coffin bone, and for the formation
of

of the sensible laminæ there, which being destroyed, as above-mentioned, a hollow space will remain (perhaps through life) between the external surface of the coffin bone, and the internal surface of the horny crust or hoof.

The growth of the horny crust originates at the coronet, forming insensible laminæ in its internal surface, to be articulated to the sensible, which being previously destroyed by disease, &c. renders an union impossible. This is the immediate result of unskilful hands, and an inconvenience hardly to be got rid of. When a knife might be used instead of those burning oils, with safety, and repeated as often as necessary without danger.

Case 2.

THIS horse was the property of Mr. Corster, of Wallingford, in Berkshire. The disease was occasioned by the neglecting of an acrimonious discharge from a farcy, greasy leg, (vide case 3, of the Farcy) and characteristic of canker, and the symptoms in page 46.

In this case, the disease had not made any great progress. The frog was destroyed, and part of the sole, on the side of the frog, with part of the sensible laminated substance.

Treatment.

TREATMENT.

I first cut away all the diseased frog, and that part of the sole and laminated substance which was diseased, dressing it with Egyptiacum, twice a day, and washing off the old dressing previously to the new one being applied. This treatment I continued for three days, then discontinued it two days; during which interval I ordered the foot to be immersed in warm water, two hours a day, which brought away all the adhesive dressings that had been applied; and all the diseased parts of the frog, &c. sloughed off, leaving the fore perfectly clean, after having been dressed twice a day for ten days together, with Tincture of Myrrh and Aloes. The parts then put on a very healthy aspect, and nothing more was wanting but good care and cleaning, to promote a speedy growth of frog and sole.

This horse, previously to his lameness, had ran in a post chaise, but his disease, complicated as it was, (which may be seen by referring to case the 3d of the Farcy) preventing him from doing any sort of work, for several months before I undertook the cure; and notwithstanding the violence of the disease, and the length of time it had subsisted, he was, by this simple application, enabled to endure his usual work in eight weeks, from the first commencement of the cure.

Case 3.

THIS horse was the property of Humphrey Sturt, Esq. of Clifton, in Dorsetshire.

SYMPTOMS.

A most extraordinary contraction in the heels of both fore feet; frogs soft, small, fetid and putrid, attended by a violent inflammation. Mr. Sturt informed me, upon my first visiting the horse, that he had, about a year ago, as open, expanded heels, and broad, prominent frog, as ever he saw.

Cause.

MR. STURT agreed with me in opinion, respecting the cause, he supposed it to have proceeded from the want of cleaning in some measure, and from ill shoeing, or improperly cutting the sole, bars and frog, by which the sensible frog was exposed to every projecting stone, &c. on the roads; and bruises from stubs, and the like, in hunting, had, altogether, excited a violent inflammation in the frogs and heels; though the disease had not gone on so far as to destroy much of the sensible frog, and laminated substance, yet great pain

pain, and inflammation were excited by the contraction of the heels of the crust upon the frogs, on each side, and a continued discharge of ichorous, fetid fluid was kept up for some months before I was called in.

TREATMENT.

To cure the disease, without first removing the cause, I found impossible; which induced me to set about removing the cause first, and that in the following manner. I first rasped the quarter, or heel, from the coronet to the bottom of the crust, as thin as possible (*i. e.*) till I came at the sensible part of the foot; shortened the toe as much as it would bear, and those parts of the quarters or heels that press so powerfully upon each side of the frog, I drew out with a fine drawing knife, which gave room and liberty for the new frog to grow and expand. The heels being thinned, and kept in contact with the bottom of a tub filled with warm water, in which the Horse stood six hours a day, for a week, not only caused the heels to grow much quicker than they would otherwise have done, but, by reason of the pressure, to expand to their original dimensions; which has a double efficacy in such cases, as it at the same time removes the inflammation, and leaves the foot in an equal temperature with the body. At the time I had this horse under my care, nearly the whole of the insensible frogs was cut away, or sloughed off, yet, without any other treatment, every symptom of disease disappeared, and nothing remained to be attained but a growth of frog and crust, in order to effect a cure. To give a firm texture to the growing frogs,

I caused

I caused them to be washed three or four times a day with the following embrocation, viz :—

Alum, two ounces,

Brandy, half a pint,

Tincture of Opium, two ounces ;

The Alum to be first dissolved in half a pint of Vinegar. This embrocation, in a few days, gave a covering or coat to the sensible frogs, which, at the time, were growing very fast, and perfectly found. I, at the same time, encouraged the growth of the hoofs at the heels, by frequently applying tar and hog's lard to them. With this treatment I effected a cure of this complicated disease in about six weeks, which renders it obvious, that the more simple the treatment the more certain the cure, particularly in the incipient state of the disease. I do not mean to say, that the horny crust was sufficiently grown down to bear the pressure of the long shoes in the six weeks, but that the horse was constantly ridden in tips; and in ten weeks, from the time I undertook the cure, he hunted with Mr. Sturt's own stag hounds. It may perhaps appear extraordinary, that I employed tips upon this horse's feet from the first time of shoeing, as bar shoes might be supposed to be more proper, but the weak state of the hoofs was not sufficient to carry the quantity of iron requisite to form a bar shoe.

Case 4.

THIS was a case in the General's troop, in the 11th Light Dragoons, which was treated in every respect the same as the last, and with equal success.

I should have first informed my readers that this horse had a very greasy heel, such as I could not get the better of till I had recourse to firing the diseased parts. The discharge and inflammation occasioned by this treatment, were so violent, that fomentations, poultices, diuretics, mercurials, alteratives, &c. made no material difference in the disease of the heel, though I never had a case of grease before, but what would yield to the above treatment. This induced me to fire the heel in the inflamed state, although evidently contrary to nature, and foreign to my own principles and practice; but having failed in every other attempt to abate the inflammation, and the horse, at the same time, being of little value, I knew the injury could not be great. From these considerations, I drew ten lines with an iron perpendicularly, in the heel, upon the inflamed part, which soon raised a very high degree of inflammation, independent of the pre-existing one in the part, which had the effect of counter-acting the former disease, and occasioning a new one, and then it admitted of a natural cure; for the inflammation raised in this manner, subsided without any application whatever, leaving the heel as healthy and sound as ever it had been.

Several other cases of this kind have come under my care, all of which I treated in a similar manner, with equal success, excepting one. A horse belonging to Mr. Smith, at Loud's Mill, Dorchester, had been several months under a Farrier's hands, who had cut, applied caustics, and burnt away both sensible and insensible laminæ, that the natural properties of the sensible laminated substances were destroyed, their appearance and functions altered and perverted, and lastly, put on the appearance of fungous flesh, (which can never unite with the insensible laminæ of the hoof,) so that a hollow space from the coronet to the bottom of the hoof remained, which was never likely to unite.

Shoeing.

Shoeing.

WHEN I first undertook this work, which was in 1797, I intended to have treated more largely upon the practice of shoeing horses; but I considered, that the short experience of a year and a half, could be no great acquisition to the public, although no work of the kind had been published since the establishment of the Veterinary College; therefore, determined to postpone it till I had had at least seven years practice; and during that interval, in 1798, Mr. Coleman favoured the public with his observations on the Structure, Economy, and Diseases of the foot of the horse, upon a very large scale; which comprehends the art of shoeing horses in all the various forms, so ably and explicitly, that I conceived no more than a brief explanation of the general mode of shoeing was wanting, and which is certainly of more importance than the treatment of diseases incident to horses. By preserving the foot in health, it is enabled to carry almost any form of shoe. It is true that the common practice of shoeing produces contracted heels, corns, running thrushes, and sandcracks; in some feet unnatural concavity, in others convexity; and in fact, almost every disease and deformity incident to horses' feet, which, by proper shoeing, may be easily prevented. As it appears that Mr. Coleman's observations on the foot, is in the possession of almost every gentleman, a repetition of the same words, or to the same purport, would only tend to swell this book, without producing any good effect. However, lest this treatise should fall into the hands of any gentleman who is not provided with

Mr.

Mr. Coleman's work, it may not be improper (in as brief a manner as possible) to describe the natural foot, as it relates to the mode of shoeing, and distinct from that of the anatomy of the foot. The basis, or bottom of a natural foot approaches nearly in form, to that of a circle; or a right line drawn from one heel to another, is as long as a line drawn from the heel to the toe. Besides this circular form, upon examining the bottom of a perfect foot, we find the frog, which it would be useless to describe a second time, occupying and forming at least two-thirds of the heel, prominent and parallel with the heels of the horny crust; besides the frog now mentioned, may be seen the bars, which are of no little importance to be well understood; they are situated obliquely from the heel about three-fourths of the length of the frog, leaving a deep cavity between the bar and frog on each side of it, growing prominent and parallel with the crust at the heels, with which they form a junction, and a firm foundation for the heel of the shoe to rest upon.

A hard, expanded, prominent frog, with the crust at the heels, and bars projecting and forming a level with each other, is a criterion by which a gentleman may form a tolerable idea of the propriety of applying a shoe, and of what shape or form; but if the frog be much contracted in depth, it would be dangerous to lower the heels to the same level. The space between the crust at the heel, and the bar, being made concave with a drawing knife, calculated for that purpose, and a small portion of the sole, about a quarter of an inch from the crust at the toe and quarters being carefully taken away, even a flat shoe may be applied with safety; but flat or convex fleet, require a shoe to be left sufficiently concave next the sole, to admit a picker to pass under it. Such a shoe may be employed upon any foot with safety, provided no part of it be suffered to rest upon the sole. It is impossible to apply a flat shoe to a flat or convex

convex foot, without injury. Concave feet admit of a flat shoe, in which case the surface in contact with the ground may very properly be made concave. This kind of shoe is best calculated for hunters, as by its concavity it embraces the ground, and prevents slipping; and for this purpose, the narrower the shoe the better, as it also gives the frog its full power in stopping the progress of the horse. Hard stony countries require more cover to the foot, and frequently an artificial stop to the shoe, namely, the cauker. Where caukers are necessary, they should be equally high on both heels of the shoe. By diminishing the weight of iron in the shoe, the labour of the muscles is also diminished. The flat or convex foot requires a broader shoe than the concave, which may be made without adding to the weight of it, as the internal edge of the flat shoe will, from its thickness, almost invariably admit of being beaten out one-fourth broader than usual, which shoe should always be seated. In roads which are stony, pointed, and prominent, a little more cover is required. The same observation holds good in hunting in stony countries. The average weight of the shoes employed upon the horses' feet in the 11th Regiment of Light Dragoons, to which for several years I had the honour to belong, is almost fifteen ounces and a half, which weight I find best calculated for the general run of hunters; and the same weight of iron will admit of being extended, when thought necessary, so as to afford more cover to the foot in stony countries. When called with the regiment into Holland, in 1799, I reduced the average weight of the shoes nearly two ounces; the roads being soft and yielding, consequently the hoofs required little or no defence: the breadth likewise as well as the weight of the shoe, was diminished. The high upright hoof is generally the effect of neglect, in not paring down the crust in due time; by which the inferior edges of the hoof at the heels, descend much below the frogs; and, having no substance to keep the heels expanded they gradually become
narrow

narrow and upright, similar to that of an ass's hoof; the heels contracted, the frogs small, and frequently diseased. See case No. 1, of the Rev. John Sheepshanks', Leeds; and case No. 2, of Walter Fawkes', Esq. of Farnley-Hall, Yorkshire. This superabundance of hoof causes the horse to go something like a man in high pattens, he never appears to be firm upon his legs. It is a sort of contraction that comes on very gradually, and may be prevented by early care in paring down the heels; and as easily removed or cured by the same treatment, viz. carefully paring down the heels, and gradually making the shoes thinner at the heels, by which means the frogs will soon be brought in contact with the ground. As the frog descends and expands, so much the thinner should the heel of the shoe be made, until the frog and the heels form a level, able to sustain such a continued degree of pressure, as is suited to the capacity of the frog. If the frog be prominent, as is sometimes the case, in upright feet, a short shoe or tip may be employed, for a month or two, with great advantage. Bar shoes have been frequently employed in these cases; but it is a very nice matter to calculate the pressure requisite in such instances, for if it to be too violent, it is more than probable it will excite inflammation; and if deficient, no advantage can be derived from the application. Therefore, I would recommend the short shoe for a few weeks, in dry weather; and the long thin heeled shoe in wet weather.

Nails.

THE nails I have been in the habit of using in the 11th Regiment of Light Dragoons, are of three sizes; namely, fixes, sevens, and eights; the eights are the fittest to be applied to the toe of the shoe, and fixes and sevens nearer the heel. The countersink nails are the best calculated to enter the groove of the shoe, by which they hold the shoe on tighter than the common nails, and their heads are less liable to be broken off by prominent stones, &c.

Horses are very apt to pull off their shoes in hunting, which is generally attributed to the badness of the nails, but that is seldom the case, it is the effect of improperly clenching them. If a nail of any given length be driven through a board of sufficient thickness to admit of the point passing through five twentieths of an inch, and four twentieths be cut off, and then clenched with only the one twentieth, which is left, it would admit of being drawn out with a very little force. On the contrary, was the clench left two or three twentieths of an inch long, it would most probably require ten times the force to draw out the nail. Therefore, I say, that the clenches ought to be left one half as long again for hunting, as they usually are. Ten nails, of number six, being applied to each shoe, will hold it on much firmer than eight of any larger

larger size, and may be drawn out with less injury to the foot. The above-mentioned nails are best calculated for hunters and hacks; the larger sort of horses require larger nails. The same rule holds good with respect to smaller horses.

UPRIGHT HOOFS.

Case 1.

HAVING described the upright hoof, with the cause and consequences, I beg leave to introduce a case of it in a horse, the property of the Rev. John Sheepshanks, of Leeds, in Yorkshire. In December, 1802, Mr. Sheepshanks applied to me to attend a coach horse of his, that, by some accident, ran away, and, in turning a corner, bruised his shoulder very much against a wall. A Farrier who attended him applied some sort of oils, which having run down the leg, made the horse appear very lame. I was induced to examine the feet, when I found enormous high, upright hoofs; the remaining portion of frog, which the disease had left, was completely rotten, and admitted of a considerable quantity being pulled off by the fingers. There was also a violent discharge of the most fetid kind I almost ever smelt; not the smallest particle of sound healthy frog left in either of the feet; and the hoofs, at the heels particularly, were more than an inch longer than is usual in a healthy foot; the heels being contracted more than an inch and a half. I caused the heels to be pared down to their proper length, the whole of the diseased frog to be cut away, leaving the bars as prominent as the state of the foot would allow; and

and caused the exposed surface of the sensible frog to be dressed two or three times a day with the following astringent mixture :—

Spirits of Wine, half a pint,
 Alum dissolved in a pint and half of boiling water, half an ounce,
 White Vitriol, and Sugar of Lead, each four drams.

This lotion, simple as it appears, I find a very efficacious astringent, detergent antiputrescent, in all foul, putrid and running thrushes. The cause of the running thrush being removed, namely, the contraction, by paring that part of the hoof away at the heels, which pressed upon the frogs; the above application very soon removed the disease. I never saw the horse after the operation; but I frequently met Mr. Sheepshanks, who informed me he was doing very well.

Case 2.

THIS horse was the property of Walter Fawkes, Esq. of Farnley-Hall, near Otley, Yorkshire. The enormous height or length of hoof appeared to be the immediate effect of neglect, of the blacksmith, in not paring down the external crust so low as he ought to have done each time of shoeing: it is more than probable, in this case, as well as in many others of a similar nature, that the horse had not been shod for six weeks, or two months together, during which time the hoofs grew considerably, and the blacksmith, when sent for to shoe the horse, paid no regard to the growth of hoof since the last shoeing,

ing, and had pared no more away from the crust of the foot than if he had shod him only a fortnight before. This neglect being several times repeated, gives the hoof liberty to grow considerably higher than usual, the frog, at the same time, losing its action, and becoming contracted and diseased: the heels contract upon the small remainder of frog, and, of course, inflammation ensues, which nature vigorously resisting, too frequently terminates in that fore disease to horses, called the canker. It is generally supposed that the fluid discharged from an inflamed frog, is purely the work of nature to get rid of the present existing inflammation. I have no doubt of the great wisdom displayed in preventing the destruction of animal life, and believe, that the secretion in the frog is nearly as great in health as in disease; only in the former case it is imperceptibly converted into sound parts, forming the frog, &c. The truth of this is obvious, otherwise the consumption of frog at the bottom, would be quicker than the secretion at top could supply. It is probable that the secretion is in proportion to the supply of blood; consequently there may be an increase of secretion during the existence of inflammation in the parts. The inflammation is therefore the cause of the increased secretion, and the secretion the effect. The cause being removed, the effect ceases. Contraction is the result of removing the frog and bars. Inflammation is in consequence of contraction, and increased secretion is in proportion to the inflammation.

There was no material inflammation in Mr. Fawkes's horse, although the contraction was considerable, the diameter of the vessels being probably adapted to the quantity of blood thrown into them. To remove the contraction, I caused the quarters to be rasped as thin as the horse could bear, without pain; I then, with a fine drawing knife, pared away all that part of the quarter contiguous to the bars, which gave pressure to the frogs, leaving an opening between
the

the quarter of the hoof and the frog, by which means the frog was left at liberty to expand at least half an inch. I also ordered the crust, (which was not less than an inch and a quarter higher than it ought to have been) to be pared down as low as it possibly could be, to leave a sufficient quantity of hoof remaining to admit of nailing a light shoe or tip upon it. As it was found inconvenient to keep the horse in the stable, during the growth of hoof from the coronet to the bottom, I ordered him be turned out into a soft pasture, and gave directions for the operation of paring away the part which pressed upon the frog, once a month, till the quarters were grown down.

CONTRACTED HEELS.

Case 1.

DURING my stay at Weymouth Camp, in 1796, I had the honour to be called in by the Rev. Mr. Piccard, of Warmwell, near Dorchester, Dorsetshire, to see a horse that had contracted heels, and the cartilages exhibiting symptoms of incipient ossification.

I caused his shoes to be taken off, and his heels, from the coronet to the lower edges of the hoofs, to be rasped as thin as possible, without injuring the sensible laminae, (described in page 59,) and the toes pared as short as the horse could conveniently stand upon them. I then had the pavement taken up in the stall, and the space filled up with clay, made wet, to about the consistence of cream, or a little thicker, and directed that he should stand in it with his fore feet, up to the fetlock joints, eight or ten hours a day, for about ten days. By reducing the hoofs at the heels, I was enabled to bring the frogs nearly in contact with the soft ground at the bottom of the stall, which, together with the pressure applied to the weakened quarters, caused the heels to expand

pand as fast as they grew down. About ten or twelve days after the operation of cutting away the quarters, the cartilages being, as before-mentioned, diseased, I fired them in straight lines about two inches long, and five lines on each cartilage, and blistered them. In about ten or twelve days after, I repeated the blister. Immediately after the effect of the second blister was gone off, the horse appeared to suffer no inconvenience from the former disease, and little from want of hoof. As soon as the quarters were grown down, he was perfectly sound, the heels expanded, and the feet were as perfect as they ever had been.

Mr. Piccard having done me the justice to cause the mode of shoeing which I had recommended, to be strictly persevered in, viz. that of preserving the frog, bars, &c. the horse continued, and performed his usual exercise of hunting, &c. About three years afterwards I was again quartered at Dorchester, and being called in by Mr. Piccard, I inquired after the horse which was formerly under my care, who informed me, that he was perfectly sound, and had been so ever since I left that country. I examined his feet, and found them completely healthy.

Case 2.

THE second case is that of a remarkable large coach horse, the property of the Bishop of Durham. His lameness had arisen, in a great measure, from concussion, and the removal of the frog and bars. The feet were very much inflamed,

inflamed, and the horse, of course, unable to do any sort of work. I caused his shoes to be taken off, the heels of the hoofs, called the quarters, to be rasped away to the sensible, laminated substance, the crust, at the heels, to be lowered, the small residue of frog preserved, and that he should stand in a tub full of water heated to 106 degrees of Fahrenheit's thermometer, eight hours a day, for near three weeks; in which time the feet were relieved of the inflammation; and, almost all the symptoms of that excruciating pain he had before suffered were alleviated. By the above treatment, in a very short time, he was enabled to trot upon moderately hard ground, without shewing any symptoms of material lameness; as the cartilages were ossified, as is generally the case in contractions of long standing, and the inflammation being abated, I fired the cartilages, as I had done in the case of Mr. Piccard's horse. In about six days I blistered him, and applied bar shoes, having six nails placed round each toe. When the frogs had acquired a considerable degree of firmness, I directed a bar shoe to be placed in contact with the frog, the pressure of which caused the growing frog to expand considerably. This pressure upon the frog, by the shoe, caused the heels also to expand very much, so as nearly to make up the deficiency in the foot or heels to the usual diameter. When the hoofs were grown down at the heels, and formed a junction with the bars, the feet appeared nearly as circular as before the contraction took place. The horse was turned out to graze for a few weeks, after that taken up, and put to work. The regiment being ordered to march to Dorchester, in Dorsetshire, I was obliged to leave the horse under the care of Mr. Hulcup, the Bishop's steward, to whom I wrote a few months after to inquire about the horse, and to give directions respecting the shoeing of him. Mr. Hulcup, in his answer, informed me, that the horse had been constantly at work ever since I left him, but that he thought he was sometimes a little tender, which I supposed

posed might be caused by the nails being placed too near the quarters, when he was shod, they not being sufficiently grown down to bear a nail ; or that the quantity of iron, or thickness of the shoe at the heel occasionally gave the horse pain ; still he continued his work without inconvenience. In June, 1798, the regiment received orders to march to Canterbury ; on my way, I called at Mongwell, a seat of the Bishop's, where I had attended the horse, in hopes of seeing him, but unfortunately he was gone to Durham, with the Bishop, a journey not less than 200 miles (the Bishop, as I have been informed, seldom travels less than fifty miles a day, when he is on his rout from Mongwell to Durham), which gives me reason to suppose the horse was perfectly sound, to be able to perform a journey of that distance, along with the other horses.

Case 3.

THIS horse was the property of the Right Honorable the Earl Cavan, and proved to be one of the worst cases of the kind I had seen in my practice. The cartilages were completely ossified, the bars and frog cut out to the sensible laminated substance, which had reduced it to about one fourth of its natural size. I caused his shoes to be taken off, and the parts, described between the bars and frogs, Case 1 and 2, in upright hoofs, to be pared away, weakened the heels or quarters with a rasp, and ordered his feet to be kept in water, as in case 2, for two or three weeks, only allowing them to be out during the night. The cartilages being ossified, I applied the actual cautery, and blisters, which were repeated about ten days afterwards. As soon as the inflammation had subsided,

fided, he was shod with the long thin heeled shoe; at this time his feet were greatly expanded; and as far as the growth of the hoof had reached, the frogs were much more prominent than when I first examined them; the thin-heeled shoes having permitted them to come in contact with the ground. I caused the horse to be trotted several times backward and forward, upon a piece of hard road, near the blacksmith's shop, the coachman being present with two Farriers, who all allowed him to be perfectly sound. This was the last visit I had an opportunity of paying him.

Case 4.

THIS horse belonged to Sir George Cooke, Bart. Wheatly-Hall, Yorkshire, and was a case in its incipient state; for as soon as Sir George discovered that he was tender on the pavement, he applied to me, to examine his feet, I found them contracted, but not so much as in many other instances. I had his shoes taken off, and the crust of the heels pared down to a level with the frog, which was not so small as I usually find them. I rasped his heels and hoofs, at the quarters, for about an inch from the coronet downwards, till I came at the sensible parts. I also ordered him to stand in warm water four or five hours a day, for about a week or ten days, at the expiration of that time he was turned out to graze in tips. The bars having been previously cut away, the shoe had occasioned a corn in one foot, which by preserving the bars, leaving the space between them and the crust hollow, the corn was cured. I called
upon

upon Sir George about six months after, who informed me he had given the horse to his son, who had hunted him in his turn with the other horses, and that he was perfectly found. I examined his feet, and found, from the operation performed upon them, that they were very much expanded, to the satisfaction of Sir George.

The horse to be trotted several times backward and forward on the hard road, near the blacksmith's shop, the coachman being present with two farriers, who all allowed him to be perfectly found. This was the last visit I had an opportunity of paying him.

THIS horse belonged to Sir George Cooke, Bart. Whitehall, York-
shire, and was a case in its incipient state; for as soon as Sir George discovered that he was tender on the pavement, he applied to me, to examine his feet. I found them contracted, but not so much as in many other instances. I had his shoes taken off, and the crust of the heels pared down to a level with the frog, which was not so small as I usually find them. I rasped his heels and heels at the quarters, for about an inch from the coronet downwards, till I came to the sensible parts. I also ordered him to stand in warm water four or five hours a day, for about a week or ten days, at the expiration of that time he was raised out to grass in the park. The bars having been previously cut away, the toes had occasioned a corn in one foot, which by paring the bars, leaving the space between them and the crust hollow, the corn was cured. I called upon

OBSERVATIONS

WARM WATER.

I BEG leave to inform my readers, that in the early part of my practice in the 11th Regiment of Light Dragoons, I almost invariably, in cases of contraction in the feet, after the operation of thinning the quarters, caused the horses to stand in a tub of clay, reduced to the consistence of thick cream, by adding water. The water and clay, of course, were employed with an intention to abate the inflammation, then existing in the feet, as well as to soften and promote the growth of new hoof. This practice I pursued for some time in the regiment, not having convenience to get warm water; I am however, very well convinced, that cold water and clay not only soften the hoof and promote its growth, but abate inflammation, yet, by quite a different process to that of warm water. The cold water and clay abate inflammation by their density and sedative powers, and the intense cold medium to which the parts have not been previously accustomed for any length of time, added to their powerful repellent properties. This appears to be accomplished by the cold repellent power of the water and clay, diminishing the diameter of the blood vessels.

This

This process of abating inflammation is very slow, compared with that of putting the feet into warm water, which gives a pleasant sensation to the inflamed part. The best calculation I have been able to make of the comparative difference of cold and warm water, in promoting the growth of hoof, and abating inflammation in the feet of horses is, that the *warm* water not only relieves the inflammation in about one sixth part of the time that the cold water and clay do, but that the growth of the hoof is about three times as quick, and the inflammation is abated by the effect of insensible perspiration. I am strongly inclined to believe that cold water applied to horses' feet, in some cases, for a great length of time, proves injurious. It appears to debilitate and benumb the joints. Cold, to a certain degree, no doubt, acts upon weak joints as a tonic; but an excess of that medium, I am persuaded, produces direct debility. Uniformity of temperature adapted to the natural heat of the parts, bids fairest to remove such diseases as appear to have been occasioned by variation of heat. I have formerly been accustomed to apply the cold medium, but have frequently observed, that horses, after standing in cold clay and water all day, upon being taken out, have appeared so extremely feeble, that they could scarcely walk, even upon turf; this was the case in a favourite horse under my care, of Lord Charles Somerset's, who after having stood about six days in soft clay, grew daily worse. I therefore ordered his feet to be put into water, heated to 106 degrees of Fahrenheit's thermometer, and soon found a considerable improvement in his going; he continued to stand in water nearly to the above heat, for five or six weeks, without any symptoms of that debility, which had apparently been occasioned by the clay and cold water. I have frequently observed the same thing happen under similar circumstances; in consequence of which, I recommend warm water, where it can be conveniently procured, in preference to clay and cold water. When it is inconvenient to prove the

temperature of the water by a thermometer, the hand will be found tolerably convenient, as 3 or 4 degrees will not make any material difference, the hand not being able to bear more than 110 or 112 degrees, and that heat will not give any unpleasant sensation to the horse's foot. Ten degrees below that heat will not answer the desired purpose; 4 degrees above it, namely, 116 would not only make the sensation unpleasant as a fomentation, but excite evaporation of the living principle of the hoof, which would lose its elasticity, and break when nails were driven into it. Excessive heat stimulates, and does not debilitate so much as intense cold. Too long an application of moderate cold or heat produces relaxation and atony, and the parts become reconciled to the application.

I made the following experiment upon a horse with an inflamed heel, the inflammation was the effect of inattention in grooming, and ran very high; although the horse was not lame, I put him into a cold stable, and added an additional sheet and hood to his other cloaths, and a large canvas bag, into which I put the inflamed leg, and filled it up with snow, and although the snow was pressed down very tight, it was all dissolved by the heat of the leg in about two hours; I caused it to be filled again, and it was near three hours in dissolving; in the evening I filled it a third time, and left it. In the morning I took off the bag and examined the heel, and found the inflammation very much abated. I repeated the snow again, and it did not dissolve under five hours; when empty I repeated it until the third day, when there was but little inflammation remaining; at night I filled the bag as full as I possibly could, tied it up, and left it till the next morning at nine o'clock, being fifteen hours from the time I filled it, and it then remained nearly half full; the horse expressed some pain in the heel and quarter. The leg was at this time entirely free

free from swelling and inflammation, I attributed the pain to the intensity of cold, after the inflammation of the leg had subsided, notwithstanding there was neither swelling nor heat. I was determined to carry the experiment of the effect of cold still further, in order to prove its sedative, debilitating power; I filled the bag as before with snow, which did not melt more than one fourth during that whole day and night, when I examined him again next morning he could with great difficulty be moved in the stall, and was apparently unable to bear one pound weight upon the diseased foot, although not the slightest symptom of inflammation or disease could be perceived. The horse grew considerably worse the last twelve hours the snow remained upon his heel. Being then convinced that the cold acted as a direct debilitating power, I discontinued it, and let the horse stand all that day in the same cold stable, without moving him; I examined him next morning, when he could move from one side to the other without expressing much pain. I then ordered him into his own stable, without applying any thing to the leg, at the same time forbidding friction by the hand. The following morning I caused him to be taken out of the stable and trotted 20 or 30 yards, which he performed without shewing any signs of lameness. This experiment of the effect of intense cold is sufficient to prove its debilitating effects, when employed to excess, and that removing the horse into a warmer medium and thereby restoring his leg to its former strength and activity, indicates that moderate warmth is congenial to the natural powers of the animal.

Cold produces its effects by a direct operation, always in proportion to its intensity, and the length of time it is employed. Cold, and long continued temperate heat, cause atony and laxity of the vessels, and sometimes gangrene.

Heat

Heat in excess stimulates; temperate warmth, if not long continued, proves salutary and refreshing to the animal fibre, and the nervous functions. But when a tepid heat is long protracted, it produces Languor, Lassitude, and Debility.

CON-

CONTRACTED FEET.

Case 5.

THIS horse was the property of John Johnson, Esq. of Sandtoft, called Sir Solomon, the celebrated racer; he was the first horse that beat Cockfighter. About three or four months before he went into training, to run at Newcastle, his feet were considerably contracted, his frogs small and narrow; but there was very little inflammation, and the contraction in the incipient state. I found it practicable to expand them without weakening the quarters. The portion of horny crust at the heels, pressed upon the frog, which had excited inflammation, very similar to that of the nail growing into the quick of the human toe. I pared away all that part of the crust which pressed upon the frog with a fine drawing knife, which gave the frog room to expand on each side a full quarter of an inch. This being done, I applied the patent artificial frogs upon the natural frogs, employing just pressure sufficient to reduce the frogs in depth about the tenth of an inch, and caused the pressure to be increased a little every day, so regulated as not to excite inflammation in the frog. This practice was pursued for two or three weeks, the parts between the crust, and the heel and frogs,

frogs, being frequently pared away. The heels being greatly expanded, and the frog hard, I had him shod with the common long shoe, bringing the frogs upon a level with the heels of his shoes. He became sound, and was frequently galloped, and about two months afterwards was sent to Newcastle, where he won the cup; unfortunately, the horse, after having run at Newcastle, being obliged to be shod by another smith, who was not acquainted with the bars and frog, cut them all away, which occasioned a second contraction, much worse than the first. I was again sent for, and repeated the operation of cutting out the crust which pressed upon the frogs, but the frogs being too tender to bear the pressure of the artificial frog, I only exposed them to dry straw in the stall, and ordered the artificial frogs to be applied when the frogs were sound enough to bear them; this treatment, the second time, removed the contraction, and the horse recovered from the tenderness, was again trained, and won a second cup at Newcastle, and at Nottingham, although Mr. Johnson was doubtful, whether he could ever be trained again. I saw him several times after my attending him, and his feet appeared perfectly sound; after that I was informed he was sold to Mr. Saville, for One Thousand Guineas.

Case 6.

THIS was a chestnut mare the property of Thomas Johnson, Jun. Esq. Her heels were very much contracted, I think I never witnessed any worse in my life. I directed her shoes to be taken off, and her heels, or the crust of the heels, rasped about half an inch from the coronet downwards to the

the sensible, laminated substance. I also reduced the crust at the bottom nearly to a level with the remaining small portion of frog, which was diseased, and a copious fetid matter perpetually discharging from it. I ordered her to be kept clean, and exposed to a hard surface for several days; her legs being swelled from very hard work, I recommended firing them, which was complied with, and a few days after turned her out to grass, where she remained all the summer. I saw Mr. Johnson in the winter following, who informed me that the mare was quite sound, and her feet as good as he could wish them to be.

Case 7.

THIS was a case in the 11th Light Dragoons, the horse was rode by Sergeant Bowser, was a favourite in the regiment, although an old horse, and had been lame half a year. He was kept, hoping that some opportunity might offer of turning him out to grass, by which he might recover. As soon as I joined the regiment, I was informed of this horse; I examined him, found him very lame, and tender on both his fore feet, which were contracted till the two heels came nearly in contact, that is, that there was scarcely any frog intervening; and that which remained was diseased; his cartilages were ossified and completely inflexible; I immediately rasped away all that part of the hoof called the quarters, from the coronet to the bottom of the crust, pared away the part which pressed upon the frog, and cut the edge of the crust as low as the horse could bear, to be able to stand in soft clay, letting him remain in the clay

clay three weeks, I fired his cartilages, and put him into the clay as before, in which he stood six hours, every day, for eight weeks, at which time the regiment was ordered to march to Hounslow Barracks, whither he travelled without expressing much pain, and was then shod in the long shoes, with thin heels, in which he went about 12 weeks, his frogs having descended nearly to a level with the crust at the heels; and to prevent any future contraction, I shod him with tips; at first he went a little tender; but in about a week or ten days, he became sound; at which time his feet were expanded to nearly their original diameter, and the horse was free from all lameness or disease.

Case 8.

IN some few instances, contraction takes place in one heel only. Lieutenant Childers' Horse of 11th Light Dragoons, was first lame, although but slightly, at York, but by the time he arrived at Hounslow, he was much worse. Mr. Childers desired I would do something for him; upon examining him, I found that the contraction was in one quarter only, apparently from improper cutting away the frog more on one side than the other, giving liberty for the crust to press upon the portion left; which was not sufficiently strong to resist the contractile power of the horny crust. The cure of this lameness was extremely simple and easy; with a fine drawing knife, I pared away all that part between the frog and quarter, leaving a space sufficient for the frog to expand about a quarter of an inch; and repeated the same operation ten days afterwards, and ordered the diseased frog to be washed every day

day with a little weak vitriol and water, the horse was perfectly found in a fortnight, and fit for work.

Case 9.

THIS horse was the property of Lord Charles Somerfet, he having been under the direction of Mr. Meercroft, and some other Veterinary Surgeons, for a year, before I saw him, I entertained very feeble hopes of being able to render him any service, and at first declined making any trial; but at the particular wish of Lord Charles, I proceeded in the following manner: I took off his shoes, pared away the part of the heel before described, which pressed upon the frog, thinned the quarter to the sensible part, and put his feet into a tub of clay, as in the case of Serjeant Bowser's, for about six days; but supposing that the cold clay and water weakened his joints, I changed the treatment to warm water, in which he stood five or six weeks; after that, I fired his cartilages and blistered them, turned him upon a soft place, in the day time, and took him up at nights, and repeated the blister two or three times, but to no purpose. I then applied the strongest stimulating embrocations I could think of for several weeks, but finding he continued lame as ever, I applied to Lord Charles, for leave to destroy him, who gave me an order so to do, which was executed; one foot was sent to the Veterinary College, to be dissected; and the other I dissected myself, and made blood-vessel-preparations of his hind feet, one of which I sent to Lord Charles: in the foot which was dissected at the College was found, an ossification of the sensible laminae, which was supposed

to be the cause of his incurable lameness, no such disease existed in the foot which I dissected. I am, however, perfectly satisfied, from the repeated dissections I have made on the feet of horses, supposed to be incurably lame from contractions, that the inflammation excited by it has terminated in an ossification of the laminated substance of the feet, together with the cartilages described in the introduction; and that the success of the operations in which I have been so generally fortunate, has been owing to the early stage in which they were performed; this is corroborated by my success in curing at least 150, out of 170 cases, which have come immediately under my superintendence within these last 10 years.

CUTTING.

CUTTING.

THIS is a subject which well deserves our attention, independent of the pain the poor animal endures from the repeated blows he must unavoidably receive from the opposite foot; and from the great danger his rider incurs, there is attached" to it, the most unpleasant sensations I am acquainted with. I confess I am shocked when I think how many centuries have past over the heads of so many thousands of Farriers, in this kingdom, without the least improvement having been made, (except in a short tract by Clark), in the art of shoeing horses, till the establishment of the Veterinary College, even not so much as to point out a remedy for the most trifling obstacle, namely, that of cutting. Nothing is more simple, than that of removing the habit of cutting, by carefully observing what position a horse's legs are in, during the act. If such a horse be made to stand upon a board, or any other perfectly level surface, it will be found, that the horse does not stand perpendicularly upon his fetlock joints; he has acquired a habit of standing with the fetlock joints bending a little in, from having the outside heel of the shoe made thicker and higher than that on the inside, and a perseverance in this practice must inevitably bend by degrees, the two fetlock joints towards each together. This mode of shoeing sometimes produces weakness, particularly in young horses; and

and those that are worked beyond their strength, as post, and chaise horses, which can scarcely avoid cutting. The fault is generally laid upon the shoe on the contrary foot, but if the evil be in the shoe, it is in that which is on the foot which is cut, and not that which cuts, and the cause is either in the inside heel of the hoof being pared lower down than the outside, or that the shoe is made thicker on the outside heel than it is on the inside, both have the same effect in bringing the joints near together. If a horse cut with one foot only, reverse the mode of shoeing, which I have stated to be the cause, and it will effectually prevent his cutting; if he cut on both legs, the same alteration on both will prevent it. Cutting may be avoided without any alteration in the shoe in some cases, where a long continued use of that plan of shoeing has not occasioned a habit of standing with the legs bending towards each other, by removing three times the quantity of hoof from the outside heel, that you do from the inside.

Case 1.

WHEN the regiment was quartered at Doncaster, I had occasion to ride a hack horse several times. The best of them are not very safe, and the one I had, used to strike one leg against the other, sometimes twenty times in a mile. I dismounted, examined his feet, and found that he had cut himself, both in the speedy cut, and that of the fetlock joints, till the blood had ran down to the hoof. When I returned, I inquired of the owner if this horse would run in harness? to which he replied, there never was a better. I also asked if he would

would fell him? he informed me he had no objection to fell him, as it was a general complaint that he cut himself so dreadfully, that he appeared every minute in danger of throwing himself down. I hired him the next day, and drove him to Sheffield, and he performed the journey remarkably well; and as he was to be sold, and, according to my judgment, for about two thirds of his value, I bought him; and finding his shoes much thicker on the outside than the inside heel, I had them taken off, and reversed the thickness of the two heels of the shoes, and at the same time removed much more of the crust from the outside than I did from the inside heel. This practice entirely prevented the speedy cut, but not the cutting of the fetlock joint. It not being proper to pare away any more hoof from the heel of the outside, I had the heel of the shoe made still thinner, reducing it to the thickness of a shilling, yet this did not radically cure his cutting; the joints appeared to me to be a little deformed, inasmuch, that I began to be doubtful I should not be able to prevent the cutting; I however was determined to carry the experiment to an extreme. I again had the shoes taken off, caused the inside heel to be made about the tenth of an inch thicker, and cut the outside heel of the shoe two inches and a half shorter than the inside, so that the outside heel of the crust for two inches and a half with the sole and bars, were all exposed to the ground. I travelled him from Doncaster to London, in these shoes, without perceiving he had cut once; he went in the same sort of shoes six or seven months, without cutting, and when the common shoes were put on, he went as well in them, as if he had never cut in his life.

All the Farriers were astonished at the experiment I was making, and thought I should lame the horse, recommending at the same time to reverse

reverse the plan of shoeing, and make the inside short instead of the outside, which would have made the evil ten times worse. This treatment I am convinced from repeated trials, will prevent any horse from cutting.

GRIPES.

We learn from medical and philosophical researches, that gastric local or general, commonly arises from debility, and is usually brought on from deficient stimulus, whether that be the depressing effects of cold, want of food, or too much, or too little exercise. Cold water taken into the stomach when the animal is heated by exercise, is the common cause of gripes in the stomach and intestines of horses, containing the minute blood vessels the parts affected, and suddenly checking the peristaltic motion, &c. Too long retention of the exercise also impedes the peristaltic motion in the gut, and excruciating pain appears to arise from over distention, caused by diminished action in the parts affected, which is clearly manifested by the distention yielding to the operation of cathartic stimulus. That the most rigid contraction of muscular, or other parts, producing spasm, &c. as in a locked jaw, is the consequence of direct debility, is well substantiated by its not yielding to the relaxing plan of cure, such as bleeding, purging, and the like; but in most such cases, or in ninety nine out of an hundred, the cure is performed by stimulants. In the incipient state of the gripes, I observe, even in most common cases, namely, that of drinking cold water when the horse is over heated, there is seldom reason to suspect inflammation, in which case, a stimulus may be with safety employed.

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GRIPES.

and

and that kind of stimulus which I have found the most efficacious is oil of turpentine, in the quantity of about two or three ounces in a pint of warm water, or oatmeal gruel; and it may be repeated every four hours afterwards, if required, till the symptoms abate. Next to this approved antispasmodic, which so seldom fails in gripes, when unattended by inflammation in the bowels, when the symptoms remain any length of time, and denounce an unfavorable termination; two drams of extract of opium dissolved in a pint of warm water, and repeated every four hours, will be found a much better medicine. Large glisters of warm water, syrup of buckthorn and soap, with or without a handful of salt, should be frequently injected up the rectum; first raking the horse with a small hand, as far as two feet into the intestines, which is often of great use; in some few instances warm fomentations externally over the whole body, have been found serviceable. If the symptoms do not abate in twenty-four hours, inflammation of the stomach or intestines is to be apprehended, in which case the pulse will be found to be more frequent than usual, and the size of the artery diminished. His eyes will be fixed, his mouth sensibly colder, his extremities intensely cold and feeble, his ears damp, and he refuses food. Under these circumstances, I have usually discontinued all internal medicines, for a time, and have had recourse to external applications, such as very powerful blisters on the sides, with two or three rowels, placed in different parts of the body, where most pain was supposed to be seated; the rowels first well wetted with oil of turpentine, or in its stead, a liquid blister; if that produce no inflammation or swelling in about three hours, they should be taken out and immersed afresh in liquid blister, made boiling hot. If external inflammation cannot be raised by this treatment, and the symptoms continue, more violent measures must be employed, or the horse will inevitably be lost. The last resource is the actual cautery, in which I have frequently had success, even as
it

it were almost in the expiring hour. Copious bleeding when inflammation of the intestines has taken place, will also sometimes remove it, and ought to be tried; yet it often fails; mild purgatives are also indicated. If a high degree of external inflammation be excited by the rowels, all symptoms of inflammation in the intestines will cease in about 24 hours; that is, the legs will recover their usual temperature, the horse will become more vigorous, he will frequently shake himself, and rub his head and neck against the manger, his mouth will be warm, ears warm and dry, and a desire for drink will return, which are favourable symptoms; his first beverage after he is recovered, should be light and mucilaginous, linseed tea sweetened with honey; or good oatmeal gruel, to six or eight quarts a day, and which should be continued for two entire days, along with warm bran mashies; one of the rowels should be left in three or four days after the symptoms of inflammation have abated. If they all remain in too long, they will occasion dropfical swellings in the legs, and sometimes in the belly, leaving the whole system in a state of direct debility.

Case 1.

THIS was a case of spasm in the intestines, in a horse belonging to Lieutenant Grantham, of the 11th Light Dragoons, the symptoms were, frequent lying down and rising up suddenly, the horse endeavouring to lie upon his back by supporting his legs against the sides of the stall, looking back, and putting his nose to the parts in pain, as if to excite your assistance; loss of appetite, and slight fever; he was supposed to have been taken ill about 12 o'clock

o'clock at night, being heard by the men who slept over the stable. I gave him two ounces of oil of turpentine, in a pint of warm water, caused him to be rowelled with one rowel only, as a preventive against internal inflammation; had him raked, and a glister injected of warm water with a handful of salt in it; the horse getting but little better, I repeated the turpentine in about four hours from the first dose; he still remained uneasy, till about 6 o'clock in the evening, when I gave him forty grains of opium, dissolved in a pint of hot water; at seven he was much better, and at nine he eat a warm mash, and drank some tepid water, to which a little bran had been added to soften it; I concluded all danger was past, but desired the servant to inform me early in the morning, if he perceived any of the symptoms which had appeared in the day. The man informed me next morning about eight, that he did not quit the stable till two hours after I had left it the preceding evening; why he said I cannot inform you, but he said he found the horse much worse, and applied to one of the Farriers to go to him; upon inquiry, I found that they had repeated the doses of turpentine several times before morning; as soon as I was informed of this, I went down and found him much worse than he had been the day before, with all the symptoms of an inflammation in the intestines. I took about two quarts of blood from his neck, had him fomented, by three men, about his body, with hot fomentations, for one hour; caused the body to be rubbed perfectly dry with linen cloths, covered him with blankets, and placed two more rowels in his belly, in a triangle from the first. They had no effect, the horse got worse every hour; being at that moment ordered to go and see a horse then taken with the staggers, at grass, I left him, and ordered all the rowels to be taken out and put into boiling hot blistering ointment for five minutes, and put in again, however this was neglected, and when I returned about four hours

hours after, he was then in his dying struggles. I beg leave to remark that three cases very similar to this, have occurred in the 11th Light Dragoons, since I have had the honour to be appointed to it, and every horse recovered, though one of them was much worse than Mr. Grantham's was, when I left him; but in those successful cases, after I had taken out three rowels, and put them into boiling blistering ointment, and applied them again, they did not excite the least degree of inflammation. I clipped off the hair, about 18 inches square, and applied a hot iron, making eighteen lines the length of the part clipped, and immediately blistered it, which raised a very high inflammation in about four hours. As the *external* inflammation increased, the symptoms of the internal, decreased; and the horse recovered in four days from the time of the actual cautery being applied. The other two cases were treated in every respect in the same manner as this, (the actual cautery excepted, and both recovered. I do really believe that Mr. Grantham's horse was lost through noncompliance with my directions. Another case, similar in symptoms, happened to a horse of Capt. Fursdon's troop, in the 11th Light dragoons, during the campaign at Winfield, he shewed every symptom of the most violent gripes or spasms, in the intestines; the same method specified in the case of Mr. Grantham's horse, and the other three cases, (firing excepted) were employed, without affording any relief to the animal. Early on the third morning the horse was heard to whinny, an instance I never heard of before or since, it appeared so extraordinary to the man who attended him, that he came for me about five o'clock in the morning to inform me. I got up immediately, and went to the horse, he expressed no material pain except at long intervals, and that was by whinnying, and then gave a jump as far as he could leap in the barn. Upon inquiry I found that he got out of the barn in the night, and had been all over the man's garden, adjoining the barn, and had

been making the same whinnying noise almost all night. His pulse was a little more frequent, and small; but not so much so as to indicate any thing serious. In attempting to put my finger into his mouth, I found his jaw locked, and not having been able to obtain a passage through his body, I was then doubtful about his recovery, and as I had foretold, so it happened, in about two hours after he died. I immediately opened the body and found the duodenum, first intestine from the stomach, thrust fairly into the jejunum or second gut, similar to a man's putting his hand into his stocking and drawing the foot into the leg of it. The foot representing the duodenum, and the leg describing the jejunum. Mortification had taken place in the duodenum, extending to the stomach. The jejunum was nearly in the same state. The duodenum contained a stone with a very irregular surface, weighing nine drams and a half. This disease is called, Intussusception.

GRIPES;

GRIPES;

OR

INFLAMMATION IN THE INTESTINES.

Case 2.

THIS horse was the property of Harry Wormald, Esq. of Leeds, Yorkshire. When I was called in, I found him in the most extreme pain, frequently laying down, throwing himself upon his back, and suddenly starting up, striking his belly with his feet, looking back and touching his flank with his nose, his ears were of a cold damp sweat, his pulse rather quick and soft. I immediately took two quarts of blood from his neck, and gave him one of my bottles of Antispasmodic Balsam, which I have often found successful; cloathed him up warm, and left him about an hour, when I paid him a second visit, and found him quite composed; but with some remaining symptoms of gripes, or flight pains in the intestines. I gave him a glister of warm gruel (previously raking him well), in which I dissolved a handful of common salt; I stood by him half an hour, during that time there appeared to be a return of increased sensibility, he threw himself down, and expressed signs of greater pain than before. I gave him another bottle of the Balsam as above, in a pint of warm gruel, in which half a dram of purified opium had been dissolved. I also repeated

peated the glister with two drams of opium, which appeared to compose him for another hour or two, when the symptoms again recurred, with slight shivering and alternate heat, cold extremities, ears damp and cold; and having had only small evacuations, and those chiefly forced by the glister, I began to suspect there was some obstruction in the intestines, which had occasioned inflammation, and thought it safer to discontinue the Antispasmodic plan of cure; and repeat the bleeding, which I did, to two quarts more; and caused the whole of the body to be fomented with blankets, wrung out of hot water, and applied as hot as they could be, by three or four men, for several hours together, and gave him a pint and a half of Castor Oil, in a pint of warm water. During the application of the fomentation, the horse appeared to be perfectly at ease, but as soon as it was discontinued, he expressed as much pain as ever, consequently I caused the fomentation to be repeated, during most of the night, and the next morning the symptoms appeared to be much more alarming than ever. I then repeated the dose of Castor Oil, caused the hair to be clipped off the belly, as broad as a small pocket handkerchief on each side, and a strong blister rubbed in by two men for an hour; and by way of increasing the stimulus of the blister, and to excite immediate inflammation in the parts, I scorched them with a hot salamander, the whole time the men were rubbing in the ointment. The first application of blister seemed to have but little effect, consequently I repeated it about four hours afterwards, and gave him another pint and a half of Castor Oil, from which I obtained a passage of small lumps of hard ill-digested feces. The second blister raised some degree of inflammation, but not sufficient to counteract the inflammation of the intestines; therefore I repeated it, at the expiration of three hours, which excited a wonderful degree of inflammation, nearly all over the whole abdomen; the swelling of the muscles and skin were increased at least two inches and a half in thick-

thicknefs, which appeared to the fpectators much more alarming than the internal inflammation, which it was intended to counteract; from that time every fymptom of pain ceafed; but the paffage, not being fo open as I could have wifhed, I gave him another pint of Caftor Oil, in a pint of moderately hot gruel, and fucceeded in obtaining a free difcharge by ftool; the ufual temperature was foon reftored to his extremities, with the help of hard hand rubbing; and as corn, and his ufual food were improper to be given him in a ftate of convalefcence, I ordered him good thick gruel, in which one ounce of Gum Arabic was diffolved in every four quarts, the next day he ate a mafh of well fcalded oats and bran; and was reftored to perfect health in ten days from the firft attack of the difeafe.

Case 3.

ABOUT a month afterwards I was fent for to attend a horfe of Thomas Lee, Efq. of Woodhoufe-Lane, when I found every fymptom corresponding with thofe in the laft cafe. The treatment was exactly the fame, the fymptoms gradually increafed, and became equally as dangerous; Caftor Oil was given, and the blifters repeatedly applied, and I am proud to fay, with equal fuccefs. Mr. Lee particularly requested this cafe might be inferted in the prefent work.

Another cafe of inflammation in the intefines, occured in my practice about eight months afterwards, in a horfe belonging to Henry Entwiftle, Efq. of Leeds. I was called in about feven o'clock in the morning, and found the
fymp-

symptoms to be much more alarming than either of the former, and notwithstanding the same treatment was pursued as above, not being able to excite external inflammation, the horse died about three o'clock in the afternoon of the same day. I afterwards opened him, and found about a yard of jejunum, or second intestine from the stomach, in a state of mortification; this horse was seen on the preceding evening, in the field, apparently in perfect health.

It may not be improper to remark, that most of the cases of colic, and inflammation in the bowels, happen to those horses that are high fed with Oates and Beans, and that are only exercised occasionally, instead of being used daily, in proportion to the quantity of rich food they consume. Dry meat, and confinement in the stable, render the bowels costive; and I would recommend to gentlemen who have not constant employment for their horses, to allow them two large mashes of coarse bran, at least twice a week, with corn, at intervals; this will keep the bowels moderately open, and the horse in proper condition for exercise on the road. For horses that are hunted hard three times a week, the bran may be less necessary.

LAME-

LAMENESS IN THE FEET,

From accidental causes, such as picking up nails, &c. on the roads, pricking in shoeing, and casual cuts upon the coronet.

Symptoms of a Horse being pricked in Shoeing.

IF a horse be pricked in one or both his fore feet, and the nail which pricks him be placed towards the toe, he will stand with his foot as far pointed forwards as he can, for this position throws the weight upon the heel and relieves the toe. If he be pricked near the heel, he will endeavour to bring his leg as much under him as possible, in order to throw his weight upon the toe: He is very restless, and seldom stands still long together. If he has been shod any length of time (*i. e.*) six or eight hours, inflammation will point out the part injured. I have seen many instances of the blood following the nail, when withdrawn. If a horse be pricked in the hind foot, except the nail has injured the part very much, you will scarcely perceive him lame while he is standing in the stall, unless you turn him about in it, and that upon the bare stones, but when he is taken out, he is as lame as if the accident had happened to the fore-foot.

foot. Accidents happening from nails, or broken glaſs picked up on the road, and puncturing through the ſole or frog, produce ſymptoms quite different, in as much as the horſe (if in the fore foot) ſeldom puts his foot to the ground, when ſtanding in the ſtable, but generally lets the toe fall gently upon the ground, bending his knee, and hanging the point of that ſhoulder lower than the point of the other ſhoulder; violent inflammation ſucceeds in proportion to the pain, the animal loſes his appetite, and a ſymptomatic fever generally comes on, ſee the Caſe of Mr. Smith's coach horſe, page 105; there are ſome few inſtances of the coffin bone being fractured by a puncture of a flint ſtone, or piece of glaſs. I was witneſs to one during my attendance at the Veterinary College, the horſe was the property of Mr. Jeſop, an attorney at Waltham-Abbey, and was a caſe of mine at the College, in which I had to take away a portion of ſole, ſufficient to extract a piece of detached bone as broad as a ſhilling, and the horſe recovered. This being thought an excellent cure, Mr. Coleman received a letter from Mr. Jeſop, returning thanks to the College, for the recovery of ſo valuable an animal.

Lamenefs from being pricked in ſhoeing is to be diſcriminated by its growing worſe by reſt, when moſt other kinds of lamenefs grow better. If the cure be not removed, the animal will get worſe every day; if it be occaſioned by ſprains, or the like, reſt will frequently recover him. If the nail be driven far into the ſenſible parts of the foot, the inflammation will increaſe rapidly, and upon withdrawing the offending nail, and applying it, the moment it is drawn, to the back of your hand, a temperature exceeding that of the healthy foot will be felt. This is the moſt certain criterion by which you may be able to obtain the cauſe of the lamenefs; preſſure from the ſhoe upon the ſole, will produce lamenefs very ſimilar to that ariſing from being pricked, but
is

readily distinguished, as but little inflammation attends the foot; and on withdrawing the nails, there will be found no preternatural heat in them; if the shoe has been put on a few days, and the pressure be great, the shoe will be worn bright upon the part where it pressed upon the sole, and by removing the pressure, the horse will be immediately sound, unless it has been so long continued, as to have produced general inflammation in the foot, or that the inflammation has terminated in some other disease, such as abscess, which it frequently does if neglected. Pressure on the seat of corns produces the same symptoms, and the inflammation frequently terminates in the same manner; the treatment of one holds good in respect to the other. Cases of this kind, which have come under my care, are very numerous, probably exceeding five hundred. In the incipient state, the treatment necessary is simple and easy, and that which I have pursued has been always successful, and is as follows:

When the lameness arises from a prick in the foot, as soon as the nail is withdrawn, or the shoe taken off, when from pressure upon the sole, let the foot be put into warm water, as in cases of inflammation from contracted heels, let the limb remain in it for an hour together, several times a day; a horse almost invariably recovers, from lameness proceeding from pressure of the shoe upon the sole, in two days, and frequently in one hour; simply removing the shoe, and leaving the sole free from pressure, the effect will cease, and the horse be sound immediately. Cases of lameness from being pricked in shoeing, generally require the fomentation to be continued much longer than in the before-mentioned case; and that great care should be taken not to place another nail in or near the same hole, from whence the nail was withdrawn that caused the injury. Lameness occasioned by puncture of flint stones and broken glass is generally of very serious consequence, it makes great impression on the sensible contents of the hoof, such as the blood vessels, sensible sole, and the

the tendon of the flexor muscle at its insertion into the inferior concave surface of the coffin bone. Cases of this kind are of very great importance to be well understood, and that the common treatment amongst Farriers should be averted; which is generally that of putting into the incision a quantity of boiling hot Turpentine, Tar, &c. and if the horse should not recover in a few days, Vitriolic Acid, and Spirits of Salt are frequently forced to the bottom of the wound. Perhaps no disease or accident befalling the human subject is so immediately analogous to that of a puncture into the sole of a horse's foot, as the prick of a pin, or any instrument, under the nail of the finger, and what man would immediately fill the wound full of Spirits of Turpentine, Vitriolic Acid, Spirit of Salt, and the like? the Farrier who had been cruel enough to torment the defenceless animal, would shudder at the idea of a drop of any of the above articles being introduced into his own finger; inflammation increased by such rash practice, seldom terminates without the destruction of some very important parts under the sole, and as soon as the natural texture of the parts is destroyed, they act as extraneous bodies, and must be brought away, or else the disunited parts will never adhere.

A particle of foreign matter being lodged, even half the size of a pin's head, in any part of the sensible frog, would occasion lameness, there not being a vacuum in the whole internal hoof, large enough to contain the smallest atom, without irritating the sensible parts; therefore, I say, that every particle of inanimate or extraneous matter lodged in any part of the sensible foot, must be brought away before the horse can get sound, and if the surgeon has not skill enough to extract it, nature will most probably perform the operation herself; if not, she must labour under the painful effects through life. Small gravel, or sand, is frequently known to have worked its way from a nail hole at the

toe

toe to the coronet, detaching the sensible from the insensible laminæ, forming an abscess, called a quittor. Had the practitioner extracted or prevented these small particles from taking that course, that long process, and painful disease, might have been obviated. Men entirely unacquainted with the structure, œconomy, and mechanism of the foot, cannot possess ability to perform an operation upon so nice and delicate a part as the quick or sensible portion of a horse's foot. The necessity of this operation, nine times out of ten, may be avoided by observing the following plan, which has never failed but in one case out of seventy, since I have been in the 11th Light Dragoons, and that was in consequence of the neglect of a servant in not complying with my directions, in which case the wound was filled up with Turpentine and Tar, and set on fire in the hole, leaving the gravel behind, until it inflamed the foot, and made its way to the coronet, where it formed an abscess, destroyed the horny coronary ring at least one inch and a half, and left a considerable blemish.

OF A PRICK IN THE FOOT

WITH

A LONG NAIL.

Case 1.

THIS horse was the property of J. W. Smith, Esq. eldest son of Sir John Smith, Bart. near Dorchester, in Dorsetshire, which in running loose in a field where a carpenter had left some large nails, he picked up one of a considerable length, which punctured the sole about a quarter of an inch from the point of the frog, and took its direction to the heel by the side of the tendon of the flexor muscle of the leg; it had gone in that direction more than two inches, and was extracted with the greatest difficulty, and pain to the animal; finding that notwithstanding perpetual fomentation both night and day for several days, the inflammation increased, I was obliged to have recourse to strong physic and bleeding; at the same time, the artery, which was wounded by the nail, frequently bled copiously. The thigh, and even to the middle of his belly, was violently inflamed and swelled, together with the perineum, and part of the
other

other thigh, his scrotum was at least five times its original size. I caused all the swelled parts to be fomented, and gentle friction to be applied to the scrotum and flank, and gave two doses of a gentle diuretic, the first day of their swelling. The next morning a great part of the swelling in the flank and scrotum was abated; but the horse expressed much more pain than he ever had done before, the foot and leg were considerably more inflamed than ever, and symptoms of violent spasms frequently attacked his hind leg, with alternate profuse hot and cold sweats; symptoms of approaching locked jaw appeared, which frequently follows accidents of this kind. I immediately gave him two ounces of Spirit of Hartshorn, in a pint of warm water, in which two Drams of purified Opium had been dissolved. I waited six hours, when slight symptoms of the shivering fit appeared, I repeated the above, and gave fifty grains of James' Powder, and fifty grains of Camphire in a pill, and in about an hour after, drenched with a few pints of water gruel made warm; no return of the shivering or spasmodic affection appeared; I continued the fomentation of the foot till night, then had a large poultice put upon it. I visited him again the next morning, and found no symptoms of shivering or spasm, although the horse was so extremely irritable, that he could scarcely bear me to put my hand upon his leg. The growth of frog in the diseased foot far surpassed all the cases I ever saw, although reduced only two or three days before as low as it could be without touching the sensible frog, and projected far beyond the level of the heel, attended by the most violent inflammation I ever beheld. I immediately reduced the superfluous frog, in doing which, as soon as I had taken off the thickness of a shilling, the blood from the whole surface flew out from the very small blood vessels with great impetuosity. I confess I was very much astonished to see so prominent a frog bleed from simply cutting away the outside surface,

face, and, after a moment, I found it to be all sensible frog, the insensible apparently sloughed off from being in warm water.

The local and violent inflammation indicated a necessity of taking away some blood from the part, which induced me to suffer it to bleed to about a quart, when, by way of stopping the blood, I washed the surface with some strong salt and water. The blood stopt, and after an hour or two I fomented as before, and applied a poultice at night. I visited him again next morning, and found the frog full as large as I had done the morning before, and turned black, and what was before very sensible, had become almost insensible, the skin of the heel changing to a dirty yellow; the horse being apparently free from pain, and had began to feed; I thereupon entertained a fear that he had nearly fed his last, as the above are the most alarming signs of mortification; in fact, mortification had actually taken place in the external part of the frog. I immediately dissected away all that part which was black, upon which the effusion of blood was as great as it had been before, and it was with much difficulty I stopped it; at the same time dreading an unfavourable termination of the mortification, I immediately had recourse to the Bark, of which I gave eight ounces that day, and twelve ounces the two following days, accompanied by two drams of Opium every twenty four hours, when the inflammation and gangrene of the frog, and whole foot, were very much abated, and a thin white matter appeared. I continued giving the Bark two or three days longer, the matter at the same time becoming thicker, and more healthy; and by frequently passing a tent wetted with Tincture of Aloes, into the ulcer, healthy granulations were promoted in the part, and, in one month, the horse was sound.

Case

Case 2.

THIS Horse was a charger, and the property of Colonel Lyon, of the 11th Light Dragoons, who was pricked in shoeing; violent inflammation suddenly came on, the horse was not able to put his foot upon the ground. As soon as I was called in, I caused the shoe to be taken off, and found the offending nail very warm, which led me to determine the treatment necessary to remove it. I directed his foot to be put into warm water, for half an hour, of such a heat as I could easily bear to keep my hand in, and repeated it two or three times that day; the next morning, had him taken out of the stable, and found him much better than he was the day before. I notwithstanding desired the water might be repeated, till further orders, which being complied with, the third day he was found, and could bear his shoe; he was pricked on the 6th of February, 1798, and on the 20th of March he was again lamed from shoeing, was not pricked, but the toe being pared too near to the sensible sole, and the shoe laid flat upon it, he became lame. Colonel Lyon supposed the horse was again pricked, but upon examination, I found he was lame from the pressure of the shoe upon the sole. I had it taken off as before, and to prevent inflammation, I caused his foot to be put into a pail of warm water, repeating it two or three times that day, and the next morning had his shoe levelled well out from the part which pressed upon the sole, and put on again, and the horse remained sound.

SYMPTOMS OF LAMENESS.

A HORSE having his toes cut too short, if it be on the fore feet, he will endeavour to stand as much as possible upon his heels, bringing his toes almost perpendicular with his nose. This position takes off a great portion of the weight of the fore quarters from the toes, and throws it upon the heels. If the toes of the hind feet are cut too short, then the horse stands with his hind feet advanced forwards, and his fore feet drawn back, which attitude brings the weight of the body upon the fore feet, and heels of the hind feet; the above attitudes are sure criterions of lameness in the toes, let the cause be what it may.

In walking or trotting, if he be lame in the fore feet, he will throw his fore feet farther forward than usual, in order to bring his heels in contact with the ground, and limp when he brings his hind feet after him. If his lameness be in the hind feet, he will make long steps with them, and very short ones with his fore feet, in order to throw the weight upon the fore feet, and bring the frogs of the hind feet in contact with the ground, to take off the weight from the injured toe.

Case 3.

OF a horse pricked in the foot with a nail, (picked up by accident) similar to that of Mr. Smith's horse. This horse was the property of Mr. Read, Merchant in Leeds, Yorkshire. Upon my being called in I found the horse so lame, that when I requested the Farrier who attended him, and who was present at the time, to lead him out of the stable, he told me that it was impossible to get him out. I inquired of him if he had any knowledge of the cause of the lameness, he replied, he had exerted every nerve to discover it, but was unable. I immediately put my hand upon the hind foot, and without hesitation pronounced the lameness to be there; he declared it was not in the foot, for he had shod him since he was lame, and had examined his foot, and thought it might be in the fetlock joint. He was shod with a bar shoe upon the lame foot, which I ordered to be taken off, which being done, I examined the frog and found it had been punctured by some sharp instrument, into which I introduced a probe, and dilating the hole, and applying a little pressure with my finger upon the frog, as much as a table spoonful of matter escaped, which convinced the Farrier of his error. Finding there still remained very high inflammation, I ordered his foot to be kept in warm water, as in case 2, for three days, by which time I thought I should have an opportunity of paying him another visit, when I found him able to put his foot to the ground with the whole weight of his quarter. I again examined the state of the abscess, and observed the matter which was formed, was of a very healthy quality, and that little inflammation remained in the foot. I discontinued the warm water, washed the wound well, and dropt a few drops of Goulard's Extract,

tract, by way of drying, into the aperture, and filled it up with tow, to keep out the dirt; this being done for a few days, the horse was perfectly found. It may not be improper to remind my readers, that warm water becomes injurious to parts divided by cutting instruments, or by abscesses, after the violence of inflammation has subsided, in as much as it prevents and checks the progress of Granulation, which is the bond of union in all divided animal solids. Therefore a proportion of inflammation, in the office of granulation, should be encouraged, and if deficient, stimulated by Tinctures; but in some few instances Spirituous Tinctures are not powerful enough to perform that office, and particularly in cases of broken knees, and openings into joints subject to motion, which prevents union of parts. In cases of this kind we are obliged to sear the lips of the divided parts with a hot iron, in order to arouse the circulation in the torpid vessels, and induce them to deposit their lymph, and thereby promote the union and formation of new parts, and fill up the vacuity occasioned by the disease, or accident.

Case 4,

OF a horse pricked by a nail, by accidentally pulling off the shoe in hunting, when one of the nails entered the sensible sole, near the edge of the crust. This horse was the property of Colonel Lloyd, near Leeds, Yorkshire. As soon as the horse returned home after this unfortunate accident, the groom immediately washed the wound very properly, and with a drawing knife pared the surrounding sole away, where the nail had gone in; filled the hole full of

of Turpentine, set on fire, which being burnt out, he filled it a second time, and burnt it as before. I was sent for about three days after the accident happened, when I found the foot considerably inflamed; and entertaining a doubt that some small gravel or sand had worked into the wound, I dilated it, in order to be able to extract it, or give it liberty to come away when the horse stood in warm water, which I ordered he should do for two or three days, at which time I visited him, and found the inflammation had completely subsided, and that a thin ichorous matter was discharged, and symptoms of debility appeared in the vessels of the part, which I stimulated by applying a few drops of Tincture of Myrrh and Aloes, twice a day; I was informed in about four days after, that fresh matter had escaped from one side of the opening, which induced the groom to dilate the hole still more, supposing there might be sand or gravel remaining between the sensible and insensible sole. I continued the application of Tincture as before—I visited the horse in about a week, when I found the granulations had been too luxuriant, forming sensible sole in form of fungus, parallel with the insensible sole. A caustic not being a very safe application to be intrusted in the hands of people unacquainted with its powers, and as I could not visit the horse again, being about to leave the country, I advised some dry lint or fine tow to be applied to it, with slight pressure; being the most likely application to produce a dry surface, for insensible sole to form upon. If the granulation or fungus had projected above the level with the sole, I should have ordered a weak solution of blue Vitriol to wash it with, once or twice a day, until the superfluous granulations had been destroyed, and then applied the dry lint or tow as above; but gentle pressure is much preferable to caustic, in these cases, as the latter is apt to act too violently upon the very delicate blood vessels, while the former will leave the granulations more compact and dry. I query whether the warm water might not
have

have been continued too long in this case, producing debility in the blood vessels, and diminution of parts, rendering Tincture necessary to stimulate fresh or new parts. As fomentation and Tinctures have diametrically opposite effects, they should be employed with great caution, as too liberal an use of one may render the other necessary; and so alternately, as to prevent union ever taking place between the sensible and insensible sole, between divided skin at the knee, or any other muscular part of the body.

Inflammation in the feet is called, by most people, fever in the feet; but I confess that I am not acquainted with any disease incident to the feet of horses which I feel myself justified in calling by that appellation. If there were perceptible paroxysms of heat and cold, or any variation, I might be led to believe the term proper; but as I know no instance of such changes of temperature in the feet when the cause has been removed, I am induced to discredit the existence of a fever in that part at all, unless a sympathetic affection of general inflammation be termed fever, and which will probably remain a few days after every symptom of fever, or general inflammation, has subsided, as may be seen in the following case.

Case 5.

This horse was the property of Colonel Childers of the 11th Light Dragoons. The first symptoms were, loss of appetite, hot dry mouth, pulse frequent and small, universal tension and heat on his skin and extremities; I immediately
added

added to his usual cloathing a cloth and hood, and gave him the following pills, composed of James's Powder and Camphire, each 50 grains: Soap, a sufficient quantity to form them into a pill; to be repeated every four hours, till four doses were given; allowing him plenty of warm gruel every hour or two. The horse was much better next day and night; but finding, on the third morning, a little increase of heat, I repeated the pills as before, and injected a glister of salt and water. The next morning no symptoms of fever or inflammation could be perceived; but he was so feeble that he could scarcely stand upon his legs; had general lassitude and cold extremities, and no pulse, or action of the heart and arteries could be perceived. I left him two hours, and called again to see if any change had taken place in the temperature of the extremities, I found they grew much colder, and more feeble; I immediately ordered two men to rub his legs well for half an hour, a quarter of an hour to each leg, which produced a very comfortable and regular heat in them; and immediately as they discontinued the friction, I bound each fetlock joint up with about two yards of strong tape, as tight as possible, and over that a flannel bandage to each leg. Perhaps some of my readers may be desirous to know what effect the tapes could produce, tied round the fetlock joints? I beg leave to inform them, that their action is upon the superficial veins of the joints, preventing the blood returning to the heart, by the same power that a fillet tied round a man's arm, stops the circulation in the superficial blood vessels upwards, when under the hands of a surgeon, which blood in the extremities of horses preserves the temperature of the foot; every part of the body, however, retained its usual heat, the mouth and extremities only were cold, the circulation became gradually more feeble, with symptoms of general debility and lassitude, a delicate appetite, with frequent small and feeble pulse, which indicated the necessity of giving

giving stimulants, and of the most diffusible quality; as I then conceived it to be necessary to rouse the system to greater vigour, which I was soon enabled to do by the following electuary: Caraway seeds in fine powder, Coriander, and Sweet Fennel, of each four ounces, Compound Tincture of Cardamoms eight ounces, Camphire dissolved in spirits of Wine, two ounces, and Essential Oil of Cloves half an ounce, Honey sufficient to form an electuary; of which I gave four ounces, dissolved in a quart, or three pints, of warm gruel, night and morning. I can scarcely find words to express the wonderful change the medicine produced in 24 hours—the mouth grew gradually warm, his pulse less frequent, and fuller, his appetite returned, and his extremities became much warmer and stronger; the second day he took these medicines, he was able to walk out of the stable, half an hour at a time, twice a day, and daily increased in strength. The Regiment being then at Reading, in Berkshire, and being under orders to march into the North, and the horse not sufficiently recovered to perform so long a journey, Colonel Childers disposed of him for much less than half his value, to Mr. Bulley, surgeon, of that place, who kept him but a little while, and then sold him for a very good price, perfectly sound.

FEVER.

FEVER:

Inflammation in the Feet, succeeding general Inflammation, or Inflammatory Fever.

THIS was a horse in Captain Barton's Troop, in the 11th Light Dragoons; the disease did not affect the feet of the horse till two or three days after the inflammatory fever had left him, and in one night rendered him unable to walk out of the stable; and, in three days, left him altogether, but with his extremities much more feeble than in the horse belonging to Colonel Childers. The same remedies were employed in both, the essential Oil of Cloves and Tincture of Cardamoms excepted; he was unable to walk for six weeks, his frogs and the whole of his soles came off, or sloughed out; so that he had nothing more to support his weight, the few minutes he could stand, than the crust of the external part of the edges of the hoofs. As soon as there was a little sole and insensible frog formed, he was turned into a field where the ground was soft, in which he recovered in about three months. I should have mentioned above, that during the progress of the formation of the new sole and insensible frog, I washed the sensible parts every day with Spirits of Wine, a little diluted with water, by way of a gentle stimulus to the secretory vessels of the soles, and to prevent ulceration and unhealthy secretions in the parts.

QUIT-

QUITTOR.

A **QUITTOR** is an abscess or ulcer, formed upon the coronet between the hair and hoof, so well understood as to require no description. A Quittor forms upon any part of the coronet where the cause is applied; which is mostly a blow, or tread, from the other foot, or the foot of another horse.

A quittor is, however, sometimes occasioned by gravel, working up into an aperture left by an old nail acting upon the sensible laminated substance, separating it from the insensible, leaving a cavity from the aperture quite up to the coronet, where it lodges, inflames, and produces abscess of difficult cure; which, when it breaks, the extraneous body escapes, and leaves an ulcer. A quittor caused by the latter, is the worst to remove, as caustic is the most certain and safe remedy in that case; and the sublimate of Mercury is found to be the most effectual, but which cannot be introduced, into an ulcer, with propriety or safety, between the two laminæ; quittors proceeding from blows, or threads, are very conveniently cured by opening the abscess, when in a proper state, and introducing a quantity of sublimate into the ulcer, as far as the sinus, or cavity extends, and which will make its way out in about five or six days, when the vacuity should be filled with tow or lint, well moistened with

with Tincture of Myrrh and Aloes; or Spirit of Wine in which Aloes have been dissolved. This Tincture is sufficient to stimulate the growth of new granulations, to fill up the ulcer; which is a very speedy and successful mode of treatment.

A quittor occasioned by sand, or gravel, as before-mentioned, frequently terminates in a false quarter, or division of the hoof from the coronet to the inferior edge of the crust, or hoof. If slight symptoms indicate a quittor by the gravel working up into a nail hole, or split hoof, the best practice is to soften the hoof in warm water, and then follow the gravel with a probe, and fine drawing knife, even if it has made its way within half an inch of the coronet, as nature will then perform the cure, if she be left to herself; when, if suffered to remain and form an abscess upon the coronet, perhaps not all the assistance of art can prevent a false quarter; and if the abscess has begun to form, it is better, even in that case, to lay the divided laminated substance open, first getting quit of the inflammation in the coronet, and then frequently dropping a few drops of Tincture into the fissure; and putting on a shoe calculated to assist in bringing the edges of the divided horny fibres together; the cure of this kind of quittor is extremely simple, and only requires time for a fresh growth of hoof. Sometimes a long existing inflammation in the heel, before it terminate in a quittor, will completely alter the texture of the cartilages, that they will even become ossified; the ossific deposit will be so rapid, as very much to enlarge the heel in a very few weeks; the cartilages will lose their natural flexibility, and the contiguous integuments become ossified, and ultimately the lameness will be incurable. But to prevent or guard against this painful and unhappy termination to the animal, let the foot be immersed in warm water, as is directed in contracted feet, four or five hours a day, till the

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inflammation subside; or at least till the violence of the heat abate; then apply the actual cautery in lines not exceeding a quarter of an inch from each other, quite round the coronet, but more particularly upon the part inflamed. This is the only application that will excite fresh action in the parts, and produce a new disease, more powerful than the antecedent one.

If the inflammation raised by the iron appear to be but slight, as will be the case, where the parts are become inanimate by disease, repeated blisters will tend to rouse the circulation in the superficial vessels, and produce the required degree of inflammation; if the blister be supposed to be too weak for that purpose, two drams of Sublimate of Mercury may be added to the blister, recommended in cases of spasm, and the blister rubbed in hot, and assisted by holding a large red hot iron nearly in contact for a few minutes. This seldom fails to raise inflammation, and never should be neglected in dangerous cases of this description.

QUITTOR.

Case 1.

THIS horse was the property of Captain Horsley, of the 11th Light Dragoons, an abscess was found in one quarter of the foot, attended by slight inflammation, and had broken, two or three days before I was called in. A caustic had been introduced but did not remain in the part. I introduced a small piece of sublimate, which remained in about four days, when it was discharged, and the whole surface of the ulcer looked white; no symptoms of projecting granulations could be perceived. I washed the ulcer well with a solution of salt and water, afterwards filled it full of tow well moistened with Tincture of Aloes, and repeated it two or three times a day; the ulcer then healed, and the horse was completely cured.

Case 2.

THIS horse was in the 11th Light Dragoons, rode by a man of the name of Pope, and was the worst case of quittor I ever saw. The caustic had its
desired

desired effect, and the ulcer healed ; but I had reason to suppose that the horse had been among the other horses, and had been trod upon, by which part of the heel was brought away ; the whole of the foot and the leg were attended by violent inflammation, which I was obliged to poultice for a week, when there happened a very great loss of substance at the heel, with rather an unhealthy surface, which I frequently washed with vinegar, diluted with an equal quantity of water ; and afterwards with the Tincture, as in case 1. Notwithstanding the Tincture, the granulations appeared to be indolent, on which account I was obliged to have recourse to the actual cautery, as a powerful stimulus ; which, in about ten days, completely filled up the ulcer, and a temporary skin formed over it, with loss of hair at least three inches in diameter ; which skin, by the help of a strong solution of white Vitriol and Alum in water applied several times a day, became, by degrees, perfectly sound, but no hair ever grew on that part.

In some cases, however, when the parts have been for a length of time exposed to unhealthy discharge from grease, &c. in the heels, and where one small sinus or fistula communicates with another, in a different direction, and where the large visible fistula is supposed to be destroyed and a cure effected, small sinuses will often run along the coronet and break out in many different places ; in such instances, the actual cautery is the only certain cure. The iron should be a little larger than the fistula, so as to completely destroy the sinuses as soon as they are discovered. This practice is much more effectual than the caustic, and without it, some cases of quittor cannot be cured. I had one case of this obstinate kind, the horse was the property of Messrs. Wormald and Gott, of Leeds, in which I was obliged to force a hot iron into several sinuses, in various directions, repeatedly, and afterwards dressed them with Tincture

ture recommended in Case No. 1, which effected a speedy and perfect cure. A second case of Messrs. Wormald and Co. came under my care about six months after, which I cured with the simple Caustic and Tincture. When the caustics fail, the actual cautery properly applied, is a certain remedy.

Case 3.

CASE of partial separation of insensible from the sensible laminated substance, from the inferior edge of the crust near the heel, up to the horny coronary ring, or coronet, at least four inches from bottom to top, several attempts had been made to stimulate a growth of fresh sensible laminæ, without effect; at last Major Cumming sent the horse to me, at Hounslow Barracks. I immediately took off the shoe, and pared away all the detached hoof which covered the sinus, from the coronet to the bottom of the hoof, and afterwards scraped the inanimate surface of the sensible laminated substance till I arrived at the sensible contents; by this time the horse had lost nearly one quarter of his hoof. I caused a bar shoe to be put upon him, which rested upon the frog, the whole of the sinus being destroyed, or laid open, up to the coronet, with a sharp instrument, and the assistance of the following Ointment applied warm twice a day, with tow well bound upon the part.—Palm Oil, Common Turpentine, Common Tar, of each 4 ounces, Oil of Turpentine 2 ounces, all melted together.

Fresh

Fresh hoof formed from the coronet, which firmly united with the sensible laminated substance ; and as soon as the growth of hoof was complete at the bottom, the horse was perfectly sound, and performed his usual duty. If the whole of the insensible hoof, which was detached, had not been removed up to the coronet, union could never have been effected. If the opening only extends half an inch from the inferior edge of the crust, so that there be a separation of sensible and insensible parts, they never can be united, (being out of reach) without cutting away the insensible hoof, till you come at the sensible parts, and not then without a stimulus to excite the indolent vessels to action. If the above Ointment should not be found sufficiently strong, omit the Palm Oil, and double the quantity of Oil of Turpentine.

SPLINTS.

SPLINTS are too well understood to require any description; the cause has been alledged to be owing to their being seated immediately perpendicular to the centre of gravity of the fore quarters, on which account they are most frequently formed on the inside of the large shin bone; they are however, sometimes seen upon the outside; blows may also be assigned as another cause. A horse is most subject to splints during the two first years after he has been domesticated, and they rarely happen after that period. In old horses they are generally removed by spontaneous absorption, and seldom occasion lameness in young ones; firing is the most effectual means of removing them, which I generally used in the early part of my practice; blisters, frequently repeated will remove them in the incipient state, but when more advanced, they require firing. I have removed some few by friction only, but the best mode of treatment I am at present acquainted with, is the following mixture, applied once a day, for about four days, which has lately removed several very large ones. Take of Spirits of Wine, one ounce, Sublimate of Mercury, two drams; mix. This quantity will be found sufficient to take off (if well applied) two splints; is a very recent discovery of my own, and has proved very efficacious.

Care

Case 1.

THIS horse was the property of Sir George Cooke, Bart. which had splints of a very extraordinary kind, but I don't know whether I am fully justified in calling these excrescences splints, which were formed on both sides of the metacarpus alike, quite close to the joints of the knee; were slightly inflamed, and the horse a little lame. I wished very much to fire him, to which Sir George would not consent, as he wished to sell him as soon as possible. I was very doubtful whether blistering would remove the tumors, however, I applied a blister about every fifth day, for three times, which effectually took them off, and the horse was perfectly sound, and sold about six weeks after. The first application of the actual cautery (if properly applied) will take off any splint of twelve months standing; but if of longer duration, half the number of lines, when designed to remove the excrescence by a single application, should only be made, and other lines drawn in the interstices, about six or eight days after; this will produce the stimulus so necessary to absorption in the parts. If the splint do not decrease in size so rapidly as you could wish, it should be assisted with a blister—the following is a proper one for that purpose.

Take of Spanish Flies, in fine powder, an ounce; Oil of Turpentine six ounces; oil of Thyme two ounces. A table spoonful will be sufficient to rub any splint, at one time, and may be repeated the next day if required.

BONE SPAVIN.

A BONE SPAVIN is a preternatural enlargement of bone upon the inside of a horse's hough, attended by inflammation, pain and lameness. The pain appears to be occasioned by too great a distention of the periosteum; the lameness by the action of the enlargement of bone upon the capsular ligament of the joint; and the inflammation by the primary cause, such as treading upon, or slipping off from some irregular surface, as prominent stones, &c. contusion, such as kicks from other horses, blows with a Farrier's hammer, which too often produce lameness of this kind; it also frequently arises from too violent exercise, when the horse is young.

The spavin requires an early application to prevent a permanent lameness; for if no attention be paid with respect to curing it, before the capsular ligament become ossified, the horse will most probably remain lame through life; and too severe an application will occasion incurable lameness. Firing performed with Judgment, is the speediest and most certain cure; but a rash operator will certainly ruin the horse; if the iron be suffered to pass but one fifth part of an inch through the skin, another disease will probably be produced ten times worse than the first; yet if the iron do not penetrate deep enough to

stimu-

stimulate the absorbents to action, (by which process the bony excrescence is removed) the bone will continue of its former size; when the actual cautery is employed, it should be in perpendicular lines, and if the spavin be in its incipient state, once firing will, in most cases, suffice, and the lines should be drawn about half an inch apart, and an inch above and below the enlarged bone; the following blister should be applied in about a week or ten days afterwards, or as soon as the inflammation caused by the firing has subsided. Take of oil of Turpentine six ounces, Spanish Flies in powder one ounce, and Bees Wax two ounces, mixed over a slow fire. The blister may be applied, if thought necessary, as soon as the cuticle is formed upon the part first destroyed, by the action of the fire, and the first blister; but the application of these blisters too early, or before the skin be properly formed, and the pre-existing inflammation has subsided, will produce ulceration, and a lasting sore, along with a blemish that can never be concealed. The above blister, simple as it may appear, is safe, and will remove eight bone spavins out of ten, in the early state, if applied four or five times at proper intervals. The horse, at the same time, should be kept perfectly at rest.

I confess I approve of firing in preference to any other practice, as it performs the most permanent cure; but should be very sorry to suffer any man to fire a spavin for me, who is unacquainted with the anatomical structure of the parts; therefore I could particularly wish to recommend the above blister, or the following embrocation, with which I have in general been successful, and which never leaves any blemish. Oil of Origanum, Spirits of Sal Ammoniac, and Tincture of Cantharides, of each two ounces.

Let half an ounce of this embrocation be well rubbed upon the spavin,
every

every night, till the cuticle be excoriated, it must then be discontinued until the cuticle be regenerated; and may be applied as before, if requisite. I have had many cases of bone spavins come under my care, that have required, at least, three times firing, of the necessity of which the practitioner ought to be best able to judge. If a bone spavin be of ten or twelve months standing, and large, without producing lameness, but that the horse, at length, begins to limp, the symptoms are much more alarming than if he had been lame at the beginning of the disease; and the case requires quite a different treatment.

Instead of the lines being made with the iron about half an inch apart, as in a case of incipient spavin, they should be made at least an inch and a half distant from each other, and, as soon as the inflammation which has been raised by the first operation has subsided, a second operation should be performed, not in the centre between the former lines, but, by taking, with the strictest precision, one third of the space, which will excite the inflammation nearly to its former state. The horse should then be kept at rest in an open stable, until the inflammation raised by the second operation, be gone off, when the third operation should be performed immediately in the centre of the interval, between the first and last lines. This mode of operation will keep up a perpetual inflammation in the part, most probably sufficient to stimulate the absorbents to take up every particle of the deposit of preternatural bone, and leave the skin, if well performed, without any material blemish. This is the mode of treatment I have generally pursued, in spavins of long standing, with success. I have found it however, necessary, in some cases of this description, to blister the parts after the effect of the fire ceases, which tends to strengthen and promote the growth of hair. Spavins of more recent standing, will frequently yield to twice firing, in lines, about an inch apart, repeating it at intervals, in
proper

proper time. Blistering is, at all times, necessary to be applied after the inflammation raised by the hot iron has subsided. Great care should be taken not to suffer the horse to be strongly exercised till he be perfectly sound, as the second lameness is of greater consequence than the first; and seldom to be cured.

A Case of Incipient Spavin.

Case 1.

A HORSE the property of Mr. Woodcock, at Workop, Nottinghamshire, was cured by the simple operation of once firing, and the above gentle blister.

Case 2.

A HORSE the property of Mr. Milwood, of Milwood, in Lincolnshire, was also cured by the first operation and blisters.

Case 3.

ANOTHER horse the property of Humphry Strutt, Esq. at Clifton, in Dorsetshire, was cured of two spavins, by the second operation, and twice blistering; and not less than twenty in the 11th Light Dragoons, by the same treatment. Although I have, like other practitioners, failed in some few cases, I am convinced, I have succeeded in eighteen out of twenty, and have had at least three hundred cases of this sort under my care.

RING-

RING BONES.

A ring bone is a bony excrescence, formed upon the lower pasternbone, occupying partially one side or the other, and sometimes the front, in its incipient state; but in its more advanced stage it occupies the whole of the bone, anteriorly and laterally; it is a preternatural deposit of ossific matter upon that part, impeding the action of the ligaments of the joints, tendons, &c. young horses are most subject to it, yet old ones are not always exempt from it; absorption, however, will, in some cases, particularly in old age, completely remove it, but that is by no means to be depended upon—there are too many instances of the most powerful stimulants, and of firing, having failed to remove it.

It is common to find, upon dissection, the capsular ligament of the joint, and all its integuments, ossified together, forming an ankylosis, or stiff joint; the causes of a ringbone are bruises upon the part, sprains and exercise in over proportion to the strength of the animal; favoured, most probably by a predisposition in the vessels, to secrete superfluous bony matter; or an indolent state of the absorbents in not taking up the superabundance of ossific particles.

CURE OF RING BONE.

RING BONE, like all other exostoses, or preternatural growth of bone, is easily removed by a very simple stimulus, if applied in its infant state, and before the important parts partake of the disease, after which it frequently happens that all applications are useless. The simple blister recommended in cases of spavin, frequently repeated, will, in general, remove the complaint; in the more advanced stage, it becomes insensible to the simple stimulus of a blister, and cannot be removed without firing; and it will be necessary that the cautery, as has been mentioned in the treatment of spavin, should be repeated again and again, in the intervals, between the first lines, and afterwards repeated blisters applied, and due rest allowed for a sufficient length of time. I have cured several ring bones with the embrocation recommended in cases of spavin.

I had one case of a horse in the 11th Light Dragoons, which, after being sound for two months, from some accident, fell lame, and I was obliged to give him nine months rest. The second lameness is always worse to remove than the first; and not less than two months' complete rest, after firing, will be required to effect a cure.

APPETITE

APPETITE DEPRAVED.

SYMPTOMS.

Voracious Appetite; or a total Loss of it, with a desire to eat sand, dry Clay or Earth.

CAUSE.

MOULDY Hay, bad clover, or any indigestible substances taken into the stomach, where they are frequently found to collect and form into large balls; and also in the intestines, so as to completely obstruct the passages, and the animal dies with all the symptoms of gripes.

TREATMENT.

IN every case of this sort, in which I have been employed, I have been hitherto successful, by giving three drams of Aloes, made into a ball, with common soap, every morning fasting, till they purged; and strong Mucilage of Gum Arabic, or a pint of strong infusion of Linseed, night and morning, for three or four days after the physic had worked off.

INFLAMMATION OF THE BLADDER.

SYMPTOMS.

COLDNESS of the extremities, cold sweats; pulse frequent and small, hind legs extended wide, and frequent attempts to stale without the ability, or but in very small quantities.

OCCASIONAL CAUSES.

CALCARIOUS substances passing through the ureters into the bladder; too long retention of urine.

TREATMENT.

THE few cases which have come under my care, have been successfully treated, by first bleeding to two or three quarts, according to the strength and condition of the horse; and repeating it in small quantities every three or four days; giving, at the same time, the following Mucilaginous Mixture; take of Linseed bruised, one pound, pour upon it two gallons of boiling hot water; when nearly cold, strain it through a coarse cloth; add to it a quart of Mucilage of Gum Arabic, and a pound of Honey or Treacle, and give a quart or two every three or four hours, and inject a large glisten of warm water night and morning. In some cases the addition of Nitre to the mixture may be useful.

CURBS.

CURBS, CAUSE AND CURE.

A CURB is an enlargement upon the hind leg, just below the hough or hock, and has been called by ancient authors, Bony Excrecence, formed in that part. I never had a case of curb, that became ossified, under my care; I have dissected many without finding any symptoms of ossification, but that the theca or sheath, through which the tendon, in its action, moves, has been always very much enlarged or thickened; consequently, the diameter of the sheath so much diminished as to impede the action of the tendon, from whence the lameness. The integuments surrounding the theca are also generally enlarged and hard, and both the sheath and skin inflamed. The horse expresses much pain, and moves with reluctance and difficulty.

The most common cause arises from contusion on the part, where the swelling takes place, whether from the wilful cruelty of grooms, or accidental blows which horses may probably receive from each other. From the very great number of curbs that have come under my care in the regiment, I am induced to believe they are commonly occasioned by blows, which the horses meet with in leaping; as many horses, and particularly young ones, in the act of leaping, fall with the feat of curb upon the bar, which I have seen them do

six or seven times together. I have examined the part after leaping, and found a considerable quantity of hair rubbed off, and have repeatedly visited them next day, and discovered considerable inflammation in the part; for which have ordered a fomentation to be applied by way of preservative, and which has had the desired effect; other similar cases have not been treated in the same manner, and curbs have been the result. The common practice among Farriers is, to blister and fire immediately, as soon as they perceive the swelling, without any regard to the state of inflammation, existing in the part, which ought to be the first consideration. The rashest practice I ever saw, was at Leeds, in December 1802, in the case of a horse that at last became a patient of mine. This horse was the property of Mr. Robson, merchant, in Albion-street, which had been attended by a Farrier, who had blistered him before I was called in, and had struck a fleam, which he used for bleeding, into the tumour, in several places; to my great astonishment the horse escaped a locked jaw: the tumours were hard, and very large, but not then inflamed, I immediately fired him in about six or eight perpendicular lines, extending them about an inch and half above and below the swelling, and ordered him to be blistered in about a week or ten days afterwards; which was complied with, and as soon as the inflammation which was raised by the blister, had subsided, the horse was sound for a few weeks, during the time he was at grass, but when taken up, became lame; and this being a doubtful case, the owner parted with him. This is the only curb I ever failed in curing by firing, which no doubt was owing to the injury done to the tendon, by the fleam.

Case 2.

THIS horse was the property of Humphry Sturt, Esq. of Clifton, in Dorsetshire. Being called early to this case, I found the horse lame, and with considerable inflammation in the parts affected, which I ordered to be fomented four or five times a day, for two days; at the expiration of that time, I brought the parts into a proper state for firing, which effected a cure, at the first operation, succeeded by a blister.

It would be useless, I conceive, to swell this book with too many cases of one sort, particularly where the symptoms, cause, and treatment, all so nearly correspond. I only wish further to guard my readers against the dangerous practice of firing, during the existence of any high inflammation in the parts: the above has been my general practice without ever failing of success, except in Mr. Robson's horse, and that was only one out of 120 or 130 cases.

DISTEMPER.

THIS appears to be a provincial term. Farriers in the North of England call a catarrh, or even a common cold, or simple cough, by this name.

SYMPTOMS.

HOT and dry mouth, quick and feeble pulse, forenefs in the throat, thin and white difcharge from the noftrils; the ears cold, and fometimes damp; the eyes inflamed, and frequently watery; quick and fhort breathing denotes the difeafe to have extended to the lungs; foon after which, the whole of the extremities become cold.

CAUSE.

SUDDEN variations in the temperature of the atmofphere, particularly from warm and damp, to fevere cold weather, and vice verfa.

TREATMENT.

BEFORE the inflammation had affected the lungs, or while it remained a common diftemper, or catarrh, I have feen very good fuccefs attend the ufe of the following ball, given morning, noon, and night. Take of Emetic Tartar a dram, Flour of Sulphur, three drams, and when the cough has been trouble-
fome

some, I have added purified Opium half a dram, and made the whole into a ball with Honey. I directed hot bran mashes to be put into a coarse bag; and the horse's nose confined therein, that he might inhale the steam, which seldom fails to relax the vessels, and give a better consistence to the mucous discharge from the nostrils.

In some cases, where I suspected inflammation had extended to the lungs, I immediately placed a rowel or two between the fore legs, or applied a blister on each side of the chest, about eight inches in diameter. In other cases, where there was little or no discharge from the nostrils, and the inflammation of the membrane considerable, I have taken away two or three pints of blood, and given the following ball, with very great success, three times a day, as before-mentioned.—Pulv. Antimonialis, 40 grains; Camphire in fine powder, or dissolved in 30 drops of Spirits of Wine, 40 grains; Opium, 20 grains; made into a ball, with Lenitive Electuary.

It is not in my power to say how many cases of this description have come under my care, within the last ten years, but I think I may assert with great truth, at least 600, and that without losing one horse.

FARCY

THIS is a disease to which the horse is very subject, and to which Farriers are great strangers ; and has, perhaps, more frequently frustrated the endeavours of better informed practitioners, than any other disease to which this animal is liable. Some authors have defined the farcy to be a disease confined locally to the veins ; others, that it is owing to viscosity of the blood ; I beg leave to say, that if ever the veins are affected in the farcy, they only partake of a general affection, but the lymphatics running collaterally with the large veins of the thigh, are generally enlarged, and very much inflamed ; which inflammation frequently terminates in suppuration. The farcy often makes its first appearance in the face, and this species is, although not violent in its attack, more destructive to the animal in the end, than any other species of it, and but rarely admits of a remedy. I have repeatedly bled horses in the most inveterate farcy, and compared the blood with that taken from a horse in perfect health, without being able to perceive any difference. In the more advanced state of the disease, however, there may be perceived an increased quantity of serum, upon the surface of the blood when cold, which indicates direct debility ; and what further proves that the farcy is a disease produced by the direct debilitating powers is, that the highest state of plethora and vigour never

pro-

produce the slightest symptoms of farcy, independent of the cause, which being immediately removed, the effects will cease, and that it yields to the stimulating plan of cure. I have been informed that one horse having the farcy, has contaminated every horse, in the same stable, but this I disbelieve; they might all be exposed to one and the same cause, at the same time, but I have never been witness to the farcy being infectious. If the matter which is frequently seen discharging from a horse in a farcy be absorbed into the system of a healthy horse, it will induce the glanders, and not the farcy.

Cause of Farcy.

THE most common cause of farcy is too sudden a check of perspiration; too violent exercise producing debility; and a termination of other diseases.

THE SYMPTOMS

Are small tubercles formed on various parts of the body, particularly in the direction of the large veins of the thighs, these slowly advance to suppuration and break; they are frequently seen in great numbers upon the lips and nose; when this matter is re-absorbed, it produces loss of appetite, universal soreness, fever, and sometimes death. The neck and the whole body are sometimes full of these, which may be prevented from spreading, by cutting off the communication with each other, by means of a simple and easy operation with a firing iron made in form of a carpenter's chisel, and dressing the part with the embrocation directed in case 5.

Case 1.

THIS case will tend very much to corroborate my opinion that farcy is the immediate effect of a sudden check being given to perspiration; on my return from leave of absence, on the 16th January, 1803, and making a visit to the troops at Windsor, I found a horse in Captain Barton's troop, rode by Serjeant Knowles, very bad with the farcy; it had formed large tumours on one cheek, one hind quarter, shoulder, and fore leg, all which had suppured, and discharged a considerable quantity of acrimonious matter, the stimulus of which had destroyed the hair, and left scars on the skin, wherever it had run down. Upon inquiring how this horse was first attacked with the disease, I was informed that Serjeant Knowles was on an escort party with His Majesty, and was ordered to proceed forward as fast as possible, to order another party to be ready to set out with the King as soon as he returned to Windsor; His Majesty travelling very fast, Serjeant Knowles was obliged to ride with all possible speed. The horse was, for a few minutes, left at the stable door, the wind was brisk, and blew very cold, and in a quarter of an hour after he arrived, he was found so completely stiff, that he could scarcely move, shewed every symptom of fever, and direct debility, was nearly deprived of the use of all his limbs, with trembling and loss of appetite.

The Farriers attributed the stiffness, &c. to his being, what they term, body strained; but in a few hours after, these tumours began to appear, which immediately convinced them it was the farcy; but instead of pursuing my mode of practice, which they were not strangers to, they bled the horse, and
gave

gave him a dose of phyfic, which in a few days, according to the Farrier's own account, reduced him so low, that when he was laid down, they never expected he could rise again; they blistered the tumours, and that on the cheek repeatedly, kept him warm, and fed him well with hot mashcs, &c. till I returned, at which time the discharge from the tumours were partly stoppt, but the muscles of the neck particularly, and many others, were extremely enlarged and indurated, his legs very much swelled; a large tumour was formed upon the stifle, occupying at least eight inches in diameter; there was great weakness in all his fetlock joints, with universal emaciation. I caused the buds, or tumours to be dressed with the embrocation employed in case 5, several times a day, divided the communication of the lymphatics with a hot iron, and gave the following tonic medicines:

Take of Peruvian Bark, one pound,
 Green Vitriol one ditto,
 Purified Opium one ounce and a half,

Treacle sufficient to form the whole into twenty four balls—one of these was given every morning, noon and night, for six days, and notwithstanding these very powerful tonics, and one of my cordial balls, twice a day, in the interval of the other balls, the complaint put on the appearance of glanders; I think I may say decided glanders, and in order to prevent the disease contaminating other horses, he was ordered to be shot. I beg leave to remark, that had the horse had one of my cordial balls given him as soon as he was put into the stable, and repeated three or four times at about six hours interval, with proper care, no symptoms of farcy would ever have appeared: I say, had this been done at the commencement of the first symptoms, instead of letting blood and giving phyfic, it would, in all probability, if assisted by stimulating embrocations,



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cations, stopped the progress of the disease; and as a sudden check of perspiration is the most common cause of farcy, it might be conveniently prevented by giving, in the first attack of the chill, the following ball:

Take Dr. James' powder 50 grains,

Camphire in fine powder 50 ditto,

Extract of Opium 60 ditto, make them into a ball with Soap.

This ball may be repeated in twelve hours after, if the chill fit continue.

Case 2.

THIS was a coach horse the property of Joseph Humble, Esquire, Middleton, near Leeds; I was sent for to see this horse about 14th December, 1802, I found his off leg behind very much enlarged, and particularly in the direction of the large vein, which runs up the inside of the thigh. I sent him twelve of the following balls, one to be given two successive nights, omitting the third, to be thus continued till they were all taken, by which time the horse was very much relieved; still there was some inflammation remaining in the heel, which had before been cracked; I ordered him a gentle dose of physic, which gave him great relief; I repeated it about twelve days after, and ordered a dram of Egyptiacum to be rubbed into the crack of the heel, every day, the part being previously washed clean with soap and water. The horse recovered in about a month, and was able to perform his usual work.

Take of Calomel, and Purified Opium, of each three drams;

Peruvian Bark, eight ditto.

Treacle, a sufficient quantity to form the whole into twelve balls.

Case 3.

THIS horse was the property of Charles Coupland, Jun. Esq. Leeds; at my first visit I found a number of small buds in different parts of his body, neck, and thighs, the ichorous discharge of which had completely destroyed the hair, in many places, about as broad as large peas; his appetite was delicate, his belly very much tucked up, and the whole system rather languid. I caused the embrocation in Case No. 5, to be well rubbed upon the buds every day for ten or twelve days, and one of the following balls to be given every other night, till he had taken six.

Take of Calomel, and Extract of Opium, of each three drams;

Soap sufficient to make six balls.

No appearance of buds could be perceived in three weeks, after the use of the embrocation and the balls, the horse gradually recovered his appetite and strength. I afterwards recommended Mr. C. to give him one of my cordial balls frequently, and particularly after a chace, to prevent too sudden a check of perspiration, which might probably occasion a relapse of the disease---Mr. C. complied with my wishes, and gave a dozen of the balls when most necessary, the horse performed his work with more than his usual vigour and vivacity: I must however observe, that this case was much more simple in its attack and progress, than I generally find the farcy; as the disease appeared to affect only the superficial lymphatics, yet, being of the chronic kind, it might probably, in time, have terminated in the glanders, or incurable swelled legs. About the 19th Sept. in the following year, some slight symptoms of the old disease appeared on the skin, but considering it to be very trivial, I sent him sixteen bark balls, one to be given every night and morning; and he never had any return of the same symptoms.

Case

Case 4.

THIS case happened to a horse in the 11th Light Dragoons, in January 1803, in Captain Heigh's troop. I am not sure whether I am exactly correct in calling the disease the farcy, although very strong symptoms indicated a commixture of the farcy with the grease. I had been some little time absent, and on my return was informed, by the Quarter Master, that this horse had, for some days, a copious discharge from one heel resembling the grease; and knowing of my absence, he gave him an urine ball, and applied poultice to the heel, and repeated it several times, and in about three days after gave him another ball; still the horse grew worse daily, till at last, which was but a few days before I returned, he was not able to stand up in his stall, only now and then an hour or two at a time, expressing great pain in the diseased leg, with loss of appetite, and frequently breaking out in profuse sweats. On examination I found an opening into the upper fetlock joint at the heel, an inch and half long, the synovia, or joint oil, escaping; an abscess had formed on one side of the same joint, about the size of a pigeon's egg, was very soft, and apparently ready to break; the lips of the wound, or opening of the heel, looking at the same time very white and unhealthy. I immediately ordered the heel to be well washed, and an iron made red hot, with which I slightly seared the lips of the opening, or edges of the skin; filled the whole wound full of powdered bark, and applied a piece of cloth over it to keep it in. I repeated the iron once a day, for five days; the second day, the abscess, which was formed on the side of the joint, broke, and discharged a quantity of matter, of a bad

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consistence mixed with blood, upon examining the bottom of the ulcer, or abscess, I found it communicated with the joint. As the capsular ligament was divided, I seared the lips of the skin with a hot iron, as I had done the skin of the first opening into the joint, and also filled it with bark, as I had done before. On the fourth day, two more small abscesses formed, and on the sixth or seventh day, broke, along with the first and second openings, into the joint; the capsular ligament of which was so completely divided and diseased, as to leave the leg at least half off at the fetlock joint. I notwithstanding persevered with the iron to the lips of the opening with the bark as above, which promoted healthy granulations, and effectually united them; still leaving the joint very much enlarged and weak; but in about a month afterwards, the openings were all healed. I then fired the joint quite round, and blistered it, as soon as the inflammation, excited by firing, had subsided, and repeated it in about a month; the horse recovered the use of his leg, but was never strong enough for regimental exercise, therefore he was fold. I before mentioned the debilitated state I found this horse in, and beg leave to observe, that the following balls were his chief support for nearly three weeks.

Take of Green Vitriol two pounds,

Bark one pound,

Extract of Opium one ounce—Treacle sufficient to form them into fifty balls.

I gave one of these balls every four hours for a week, and one of my cordial balls every night; at the expiration of the first week, I ordered one of the balls to be given night and morning, with plenty of Oatmeal gruel, several times a day; and in three weeks, the horse was able to eat his food as usual.

Cafe

Case 2.

THIS horse was in the 11th regiment of Light Dragoons, in Captain Barton's Troop, rode by a man called William Thomas, and was the worst case of farcy I ever saw cured; in fact I recommended it to Colonel Childers to have him shot, as I supposed that the farcy had terminated, as it often does, in the glanders; several large ulcers were perceptible in the septum nasi, or partition which divides the two nostrils; there was a violent inflammation and copious discharge of unhealthy matter, tinged with blood, from each nostril; difficult breathing; frequent and small pulse; loss of appetite; fever; and general debility; lost to every hope, but the effect of the most diffusible stimulants; he was immediately separated from all other horses; and one of the following balls given him every six hours, for ten days, with Oatmeal gruel every three or four hours.

Take of Essential Oil of Cloves, one ounce,

Compound Tincture of Cardamoms, eight ounces,

Camphire, dissolved in Spirits of Wine, two ounces and a half,

Extract of Opium, two ounces and a half,

Cardamom and Sweet Fennel Seeds in fine powder, of each ten ounces; Honey sufficient to form the whole into forty balls.

Three ounces of Bark, mixed in a pint of ale, was given in the intervals, between each ball, for four days. The nostrils appearing very irritable from the violence of inflammation, and acrimony of the discharge, I caused

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the following injection to be thrown, half a pint at a time, up the nostrils, six or seven times a day. Thin Mucilage of Gumarabic four quarts; Purified Opium four drams, mixed well together, first injecting a syringe full of warm water, by way of washing off the mucus, &c. from the nostrils.

I omitted to mention, in the symptoms of this case, that a vast number of tubercles, or little tumours, were formed in different parts of the body and thighs of this horse, all which I dressed several times a day with the following embrocation :

Take of Oil of Turpentine six ounces,
 Vitriolic Acid, six drams, mix by degrees in a large iron mortar, till the effervescence cease, then add of Oil of Linseed twelve ounces, and mix them all together in a bottle for use. I have the pleasure to add, although far beyond my expectation, that the horse recovered.

Having thus described the farcy, its leading characteristics, cause and termination, in as explicit a manner as the subject seemed to require, with five cases; I conceive it useless to dwell longer on the subject, and shall only farther observe, that, by the same treatment, about fifty cases, of a dangerous nature, have been cured in the 11th Light Dragoons; one of the horses was the property of J. W. Smith, Esquire, near Dorchester; one of Stephen Atkinson, Esquire; and one of Mr. Simpson, Hatfield, Yorkshire: Forty horses were cured in Weymouth Camp in 1796, in different regiments there, and at least thirty in my private practice in various parts where I have been quartered, with the loss of about five or six, which terminated in the glanders.

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GLANDERS.

THIS is a case of a horse belonging to a glazier, in Doncaster, whose name I do not exactly remember. I was sent for about July 1802, and found every symptom of the most inveterate glanders, a number of ulcers in the nostrils, &c. I recommended the horse to be shot, to prevent him from contaminating the other horses, but instead of being shot, he was given to a man near Rotherham, who turned him out to graze, where he remained till his nostrils were completely dry; when it was concluded he was sound and well, and it was reported I had done an injustice in condemning the horse to be shot for the glanders, he not being glandered. This case is not worth mentioning to the public, but in vindication of my own judgment and character. I beg leave to inform my readers, that about eight months afterwards, as I was standing in the streets of Doncaster, conversing with Mr. Woodcock and Mr. Rayns' of Stone-hill, a man came riding up to us upon this horse, and upon his approach, Mr. W. said to me, there is the horse you said was glandered, and I confess I was surprised at seeing him look so well as he did; but upon examining his nose, I found several large ulcers, and an ichor in the nostrils, with loss of part of the septum nasi; the man who rode him, said, that several pieces of bone had come away during the disease.

I beg

I beg further to remark, that the horse might live many years with that disease, and in that time, contaminate a great number of good horses; and notwithstanding there was no discharge, the disease was then existing in the system, and perceptibly so in the septum nasi, or partition, which divides the two nostrils.

GLANDERS.

THIS is a case of a horse belonging to a glazier in Doncaster, whose name I do not exactly remember. I was sent for about July 1802, and found every symptom of the most insidious glanders, a number of ulcers in the nostrils, &c. I recommended the horse to be kept in a room near the other horses, but instead of being that, he was given to a man near Rotherham, who turned him out to graze, where he remained till his nostrils were completely dry; when it was concluded he was found and used, and it was reported I had done an injustice in condemning the horse to be put for the glanders, he not being glandered. This case is not worth mentioning to the public, but in vindication of my own judgment and character. I beg leave to inform my readers, that about eight or nine years ago, as I was riding in the streets of Doncaster, conversing with Mr. Woodcock and Mr. Rotherham, a man came riding up to us upon the horse, and upon his approach Mr. W. said to me, there is the horse you said was glandered, and I could not be surprised at seeing him look so well as he did; but upon examining his nose, I found several large ulcers, and an ichor in the nostrils, with loss of part of the septum nasi; the man who rode him told me several pieces of bone had come away during the disease.

I beg

TUMOURS.

TUMOURS, without containing matter, are frequently formed upon various parts of the body, neck and thighs, and are sometimes very difficult to remove. The most obstinate Tumour I ever met with, was on the flank of a horse, the property of the Rev. Dr. Scott, at Hounslow; it had been blistered by a Farrier before I was consulted, without reducing it in the least. I confess I should have treated it in the same way, had I been first called in, but finding that blistering had not reduced it at all, I put a rowel just underneath the tumour, which was at least six inches in diameter, and caused it to be turned once every day, after matter was formed; the rowel reduced the Tumour considerably, in about eight days, and I entertained great hopes it would have entirely removed it; but unfortunately, one night the horse got his teeth to the rowel, and pulled it out, and it being very inconvenient to make another stay in, from the largeness of the wound, and the tumour been very much reduced, I prevailed on the Doctor to allow me to make 6 or 8 lines across the tumour with a firing iron, which reduced it almost to a level with the rest of the flank; yet, in about a week or ten days it swelled up as large as ever, which appeared a very extraordinary circumstance to me, knowing that the actual cautery seldom fails to reduce the most obstinate swelling. I then applied the most powerful

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repellent applications, I am acquainted with, for several days, without effect, almost at a loss what step to take to remove it, being situated in the abdominal muscles, so immediately connected with the peritonæum, that I durst not attempt to do it by dissection. I resolved to pass two setons within an inch of each other, six inches in length, through the tumour, first immersing them in Oil of Turpentine, and caused them to be drawn backwards and forwards once a day; after healthy matter had formed. The setons being kept in about a week or ten days, and the tumours completely reduced, I took them out, and the incisions closed, and appeared to be doing very well for about a week or more, when the tumour began to swell again. The doctor being out of patience, and I out of heart, we suffered it to remain without any application for another week or so, when it fortunately subsided without any further trouble, this was the most tiresome and obstinate tumour I ever met with, during my seven years practice in the army.

My general method is to place a rowel in the centre of the tumour; but entertaining some suspicion of a rupture of the peritonæum, and that a portion of intestine might have protruded, I judged it prudent to try every other means before I attempted that practice.

Rowels placed in any muscular part of the body, act with safety, but if the tumour happen to be upon, or very near the joint, it requires a double consideration, such practice most probably will give room for the synovia to escape, and the second evil will be worse than the first. Firing is therefore the most safe and effectual means of removing tumours on joints, which cannot be reduced by repellents, friction, blisters, &c. the most powerful repellents I am acquainted with are the following;

Take

Take of Crude Sal Ammoniac two ounces, dissolved in a quart of
Vinegar,

One ounce of Sugar of Lead,

Three ounces of Camphorated Spirits of Wine.

The tumours should be kept constantly wet with this solution, by means of folded compresses of linen, well soaked in it, and renewed from time to time, as they become dry.

QUINCY.

SYMPTOMS.

THIS disease is analogous to the strangles, and requires nearly the same treatment, it differs, however, from the strangles, with respect to the extent of the swelling, which reaches nearly to the horse's ears, and a considerable way down his neck. The swelling and inflammation seldom failing to affect his throat, and impede every effort to swallow; it frequently terminates in a large abscess in the throat, which, when it breaks internally, the matter escapes from the mouth and nostrils. If the abscess break externally and discharge with freedom, the cure is most certain, and soonest effected. It frequently breaks externally, and afterwards collects again, and breaks internally. This disease seldom fails to produce very alarming symptoms, and requires the greatest care and attention during the formation of matter. I have been fortunate in never losing a horse in the quincy; but I have heard of many dying of the same disease, which is, however, owing to a want of early or proper care and management; it is not uncommon for the abscess to destroy one of the maxillary glands, together with one of the salival ducts which convey the saliva from the gland into the mouth; when this happens, the saliva drops down upon the ground, as it is secreted, as often also runs down the horse's neck.

neck. I have had one case of this kind in the regiment, and am sorry to say, it was not in my power to remedy the evil.

I have seen two other cases which did not come under my own immediate care, but which remained open during the horse's life. Nothing but completely extirpating the gland altogether will prevent the escape of the saliva. In the first attack of the quincy there is a considerable degree of fever, for which I generally give a ball of James' powder, every night, as long as the fever continues, if the horse be able to swallow it; with plenty of gruel, several times a day. I should have mentioned above, that there was one horse the property of Captain Carew, that had a quincy, for which I was consulted, when the horse was in a very bad state, I advised him to have three or four fresh poultices applied to the swelled glands every day, and his head kept warm with a hood, as there was great difficulty of swallowing, and of respiration, attended by a troublesome cough, which is generally the case in quincy.

I ordered four drams of purified Opium to be dissolved in four quarts of hot water, and sweetened with a pound of honey, and directed that half a pint of it should be given, with a horn, every three or four hours, which very much abated the irritation of the throat, and cough; and in about three or four days after, the abscess broke externally, and discharged very copiously healthy looking matter; at this time I was sent for to Doncaster, but left directions that the glands should be poulticed, and a tent of tow kept in the opening till the swelling and inflammation were reduced; however, after I was gone, I believe it was found to be too much trouble for the groom to comply with my directions, the tent was neglected, and the poultices left off, the aperture soon closed up, fresh swelling speedily took place on the other side of the neck, and

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it appeared that a great part of the matter was re-absorbed into the system; the lungs were affected with a kind of consumptive cough, an enlargement of the glands appeared, and an unhealthy discharge took place in the nostrils; he was for several weeks suspected to be glandered; and I was informed, that, during my absence, he died apparently consumptive. When I left the horse there was not the smallest symptom of danger, and I am satisfied in my own mind, he would have recovered, if my directions had been complied with.

I am very well aware that the reputation of most Veterinary Surgeons suffers through the prejudices, mal-practice, idleness, and inattention of grooms, to the directions given to them. As gentlemen have, however, of late, made the Veterinary Art in some measure their study, and are convinced of the rationality of the treatment, they will, it is hoped, for the sake of individual, as well as public benefit, contribute as much as lays in their power to suppress all improper interference and neglect, by supporting the more judicious and rational endeavours of the Veterinary practitioners.

Case 2.

THIS horse was the property of Lord Charles Somerset, the disease was one of the worst cases I ever saw; I ordered his neck and glands to be frequently fomented with flannels wrung out of hot water; applied poultices, and gave him the Opium mixture mentioned in the case of Captain Carew's horse; respiration notwithstanding, grew worse every day; I was obliged, at last, to discontinue the use of the fomentation and poultice, and apply Spirits of Hartshorn, three ounces

ounces at a time, several times a day, leaving in the intervals a flannel well wetted with the same, round his neck, and upon the glands. The mucus, and discharge from his mouth, acquired so tough a consistence, that he appeared every minute to be nearly suffocated with its abundance; to dilute which I put a quart of cold water into a bottle, and added to it two drams of Vitriolic Acid, and gave him half a pint every two hours; a small quantity of which passed down into the stomach, and the remainder was thrown out combined with the mucus.

I never experienced more immediate relief from any medicine than from this, when I thought the horse almost in his expiring moment; as soon as he had recovered from the difficulty of breathing, &c. I had again recourse to poultices, several times a day, with a view to bring on suppuration, and the horse having a considerable degree of fever, I gave him the following pills every night, for three or four evenings;

Doctor James' Powder, 40 grains,

Camphire, - 40 ditto,

Opium, - - 20 ditto,

Made into a Pill with Soap.

About the fifth or sixth day, the abscess broke internally, and discharged a vast quantity of matter; and as nothing could be done in this case, but keeping the parts warm with poultice, fomentation, &c. and that we might encourage the discharge from the throat, I ordered him warm bran mash, to be put into a nose bag, from which he received the steam into his mouth and nostrils, which promoted the discharge, and in a few days the horse was perfectly restored.

Case 3.

THIS horse was the property of Lord Gray de Wilton : but, as it would be useless to repeat the same practice, that I have before-mentioned in similar cases, I shall only say, that he was treated in every respect like that of Lord Charles Somerfet's, the Vitriolic mixture excepted, and that he recovered in much less time.

Case 4.

THIS horse was the property of John Parker, Esq. of Gainbro,' in Lincolnshire; the first attack was very severe, with symptoms that indicated a dangerous fever, consequently I took some blood from him, and gave him one of the James' powder balls, as in case 2, every four hours; the second night I left the horse considerably better; however, it did not appear that my practice pleased the groom. Soon after I left the town, he consulted a farrier, or rather a blacksmith, in Bawtry, where the horse then stood, and procured something for him from an apothecary's shop, of the nature of which I am ignorant, but am sorry to say that when I visited the horse next morning, I had not the smallest hopes of his life; his pulse had increased to thirty strokes in a minute more than it had been the night before; he had a violent cough, and difficult breathing; his eyes were almost closed and inflamed; the glands of
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the throat swelled; and the extremities cold. From the opposition I met with, and the injustice which had been done me by the groom and farrier, I was determined to acquaint Mr. P. who was at a gentleman's house about two or three miles from thence, with the particulars, before I could again think of trusting my medicines into the hands of a man who was more likely to appropriate them to any other purpose than that which I had directed.

I, however, took away three quarts of blood from the horse, and gave him one of the James' balls, and rubbed four ounces of strong Volatile liniment upon the throat, and inflamed glands, and left orders that they should both be repeated every three or four hours, and that a glyster of salt and water should be injected every five or six hours; his legs were to be well hand rubbed; and mashes given in a nose bag, with plenty of warm gruel frequently; I visited him the next morning; and had every reason to believe that my orders of the preceeding day had been complied with; a discharge from the nostrils succeeded, the fever and swelling abated, and I entertained hopes of a speedy recovery; I visited the horse every day for about three or four days, when he completely regained his usual health.

It may possibly appear a little extraordinary, that suppuration did not take place in this, as in some other cases of quincy.—I am not able to account for it in any other way, than by supposing, that the fever and general inflammation were restrained in their progress by the early bleeding employd, and the repeated doses of the fever powder, which, with the low, bland diet employd, caused the inflammation to terminate, by what is termed resolution, which, when it can be accomplished, is a very desirable circumstance in this, as well as various other cases of glandular inflammation.

Case

Case 5.

I BEG leave to observe, that a chesnut horse, the property of Mr. Castley, a horse dealer, in Doncaster, had a quincy, &c. the symptoms and treatment of which so nearly corresponded with the case of Lord Charles Somerset's horse, that a repetition would be unnecessary; the horse was in great danger, but recovered. Colonel Lyon of the 11th Light Dragoons had likewise a mare dangerously ill of the same disease, which recovered by the same treatment.

I have had many other cases of a similar kind, both in private practice and in the regiment, within the last seven years. In this treatise, I have generally omitted the common cases that have occurred in the regiment, and enumerated some of those which, at different times, have occupied my attention in the neighbourhood where I have been quartered; the reason is, that a great number of the gentlemen who have done me the honour to consult me, are subscribers, and are willing to bear testimony respecting the facts here inserted.

I may, I trust, be permitted farther to observe, that the cases introduced were, without exception, the worst I ever met with in my practice, although many of the troop horses have been nearly as bad, but early care and attention, in many of them, have proved that prevention is better than a cure; and that by using the poultice and fomentation to the swelled glands, with a few of the pills mentioned in case 2, and continuing the poultice as directed in case 1, with

with bleeding and glyster, if the fever run high, there is no danger whatever attends the disease. It is not one case in ten that requires the Hartshorn, or the volatile liniment, or the mixture of Vitriolic Acid and water, as I never found any occasion for it in any other case except in Lord Charles Somerfet's, and one troop horse in the 11th Light Dragoons.

LOCKED JAW.

THIS is a disease to which horses are very subject; the common causes are, a sudden check given to perspiration; violent bruises on any flexible part; punctured tendons; lacerated nerves; the wound of a nail in shoeing; or any cause producing preternatural irritability. The best preventives when the above-mentioned causes have occurred, particularly those from blows, bruises, kicks, &c. are opiates internally given, and externally applied, with moderate warmth, in form of poultice or fomentation to the parts.

CASE I.

THIS horse was the property of the Duke of Northumberland, and had a low degree before, fallen into a river with a load of timber, and was very much bruised; when I was called in, I found some symptoms of slight inflammation upon his lungs, attended with a degree of general inflammation; I cauterized to be put in between his fore legs, and made him up the belly with castor oil, raising 60 grains of James' powder; and as he had a troublesome faint cough,

LOCK-

LOCKED JAW.

THIS is a disease to which horses are very subject; the common causes are, a sudden check given to perspiration; violent bruises on any sensible part; punctured tendons; lacerated nerves; the wound of a nail in shoeing; or any cause producing preternatural irritability. The best preventives when the above-mentioned causes have occurred, particularly those from bruises, punctures, pricks, &c. are opiates internally given, and externally applied, with moderate warmth, in form of poultice or fomentation to the parts.

Case 1.

THIS horse was the property of the Duke of Northumberland, and had, a few days before, fallen into a river with a load of timber, and was very much bruised; when I was called in, I found some symptoms of slight inflammation upon his lungs, attended with a degree of general inflammation; I caused a rowel to be put in between his fore legs, and made him up six balls, each containing 60 grains of James' powder; and as he had a troublesome faint cough

I directed that one of them should be washed down, with about a pint of warm water, in which 20 grains of purified Opium was dissolved, sweetened with Honey or Treacle, and repeated every four hours; but as soon as these medicines were prepared, and in the attempt to give the first ball, I found his jaws locked, yet not so close but that I could introduce my finger, so as to give a ball. I therefore immediately dissolved it in a hornful of the prepared fluid, and put it as far into his mouth as possible; I believe he then swallowed part of it, and I ordered him to be drenched with a hornful of the same mixture, every three hours, with the addition of ten grains of Opium in each hornful, which was done that night. The next day I visited him, and found his jaws so completely locked, as not to admit of any thing being put into his mouth. I also caused his head and nostrils to be fomented the whole of the first night, and the day following; but finding no benefit from what I had done, I electrified him, and gave him twenty four shocks, and repeated it, to the same extent in about an hour; after which I endeavoured to give him some of the Opiate, and was able to get an halter into his mouth; but the struggles and convulsions which attended the attempt, appeared to make him much worse, and all our future endeavours were fruitless—he died the third morning. I have no doubt but early care would have prevented the locked jaw in this, and many other instances.

I shall just mention, that two horses were preserved from the locked jaw, early in the month of May 1803, by early care and management. Several young horses which had joined the regiment, had, during their training, undergone the operation of docking, to the regimental length required; six or eight of them were docked one morning; the next day, two refused their food, appeared very restless, constantly shaking their tails, which is an alarming symptom, they had a considerable degree of fever, stupor, and insensibility; and

and I have little doubt that in twelve hours, from that time, they would have been seized with a permanent locked jaw, had not the following means been employed. I ordered two quarts of blood to be taken from each horse, and their tails to be fomented three or four times a day; a glyster to be given every six hours for two days; and two drams of purified Opium, in a pill, night and morning. In forty eight hours, every symptom of pain and irritation had subsided. I am happy to reflect, that from the great number of causes to which horses are constantly exposed, such as violent kicks upon the joints; lacerations of tendons ligaments and nerves; pricks with nails in shoeing; and wounds from nails; pieces of glass, and sharp flints, &c. on the roads, that the above-mentioned practice has eventually prevented the locked jaw from ever happening in the 11th Light Dragoons, the one case excepted, which arose from violent spasms, or intusufception, at Swinley Camp.

CAPALETs.

I DON'T know whether I am exactly correct in this appellation, but both ancient and modern writers have used the term, by which is understood a puffy swelling on the cap, or extremity of the hough behind ; and which is almost invariably occasioned by horses kicking their houghs, or hocks, against the stall, &c. The part, in time, forms a hard callus very difficult to reduce, unless you can prevent the horse from repeating the blows which produced it.

The difficulty in reducing this tumour arises from the slowness of the circulation and absorption in the part affected. The treatment I recommend is, fomentation on the first attack or inflammation, for a few hours ; and then a blister, which is to be repeated two or three mornings in succession. If the blisters should not remove the swelling, firing is then the only remedy we have left. I have, however, frequently seen success from the blisters, in the incipient state ; and never found the actual cautery fail.

EMACIA-

EMACIATION.

I MUST leave my unprejudiced readers to judge whether I am right in denominating emaciation a disease, but from the affinity that subsists between disease and emaciation in horses, the consideration of the causes and consequences, and lastly, that there is almost an infallible cure, I hope I may be excused if I am in an error.

The *causes* of emaciation are many, and some of them unknown. *General* emaciation is owing to one cause, and *local* to another, though the general one may arise from a topical cause. General emaciations, as far as I have been able to discover, have been occasioned: 1st, By incessant labour without appropriate intervals of rest, and a deficiency of proper nourishment: 2dly, By excessive evacuations, such as violent purging, or an immoderate discharge of urine, called diabetes: 3dly, Preceding disease: 4thly, Bots, and worms in the stomach, which I have frequently discovered on dissection: 5thly, Inflammation and enlargement of the mesenteric glands, or diseased lymphatics, as in the farcy, &c. 6thly, Deficiency of nutritious matter in the food, as in the case of mouldy hay, or bad clover, which afford but little nutriment: 7thly, A defect in the digestive and assimilating powers of the stomach: 8thly, Standing up too long at a time, without laying down, as is the case

case with greasy heeled horses. It may likewise arise from accidents happening to the legs or joints, preventing the horse from taking his usual rest: 9thly, Any injury done to the tendons, or joints; or any other part very susceptible of irritation: 10thly, Imperfect mastication of the food taken into the stomach. These are the principal causes to which I attribute general emaciation.

LOCAL EMACIATION

Is generally the effect of local injury, such as dislocation of the shoulder, or any joint of the fore quarter; lameness in the stifle, hip, or hough. Emaciation happens partially also in the same quarter, but very seldom affects the other quarters. While the inflammation remains, there is no perceptible emaciation, except what arises from the discharge of the blisters, &c. or from want of the muscular action being properly supported, and giving due circulation and tone to the muscles of the part.

CURE OF EMACIATION.

EMACIATION proceeding from the first cause, requires but a very simple remedy, such as every feeling man would prescribe and employ, viz. increasing the quantity of food, or giving it oftener; since too long abstinence produces debility in the stomach, gives the gastric juice opportunity of acting upon its sensible coats, and thereby excites disease.

To remedy this malady when ascertained to proceed from the 1st cause, increase the food, and allow the animal sufficient rest.—2d. Cordial opiates and mucilages.—3d. Remedy according to the nature of case.—4th. See treatment of worms.—5th. See treatment of farcy.—6th. Nutritious food of various sorts.—7th. Bitters composed of Aloes, Wormwood, &c.—8th. Remove the antecedent cause.—9th. Remedies for wounded tendons, joints, &c. (see wounds in joints from irritability), with Opium half a dram, night and morning, for three days.—10th. Examine and repair the teeth, grind the corn, give mashes, &c. Sometimes the lampas prevents a horse from properly masticating his corn; and sometimes canker in the mouth. Squirrel-tail hay frequently produces ulcers under the tongue, the action of which being impeded, the horse refuses his food for weeks together without the cause being discovered; of course the mouth should be strictly examined.

HIDE

HIDE BOUND.

THIS deviation from the natural economy of the system cannot, I think, with propriety, be called a disease, although we suspect one remote cause is worms, bots, &c. in the stomach, producing irritation and disease in that organ; these insects probably imbibe and receive the most nutritious particles of the food, which the stomach takes in for the support of the whole animal, consequently less blood is formed from the nutriment received, and proportionably less is determined to the skin, causing penury of blood on the external surface. Also, sudden transitions from the unnatural heat of stables to a cold atmosphere, and want of friction sufficient to promote the usual circulation! As to the cure, the causes being first removed, (*i. e.*) the food being of a nutritious quality, and given with more freedom than usual for a few days, such as hot mash of ground Oats, ground malt, &c. and about half an ounce of Sulphur, and a dram of Antimonial powder in each mash twice a day, employing at the same time, considerably more than the usual quantity of friction, scratching the skin with a curry comb and stiff brush, and throwing an additional cloth over the loins. This is so common a case in practice, that I have not thought it necessary to make any particular minutes upon it, as every person who has the least knowledge of horses, must be acquainted with the symptoms, and the cause being well ascertained,

tained, the brief explanation I have given, will, I trust, be thought sufficient, particularly when I add, that, at different times, at least 6 or 700 cases of this kind, have come under my care, and that the treatment above specified, has (with very few instances of failure) succeeded.

Great care should at the same time, be taken, not to expose the horse to a cold atmosphere, without plenty of cloaths, during the administration of these medicines. To destroy the worms, give the balls recommended for worms, and treat the horse in the manner there directed.

GREASE

IN THE HEELS OR LEGS.

IN July 1805, I was applied to by Mr. Ainsley of Leeds, to look at a cart horse which had been, for a long time, in a dreadful state of grease, in one of his hind legs, and medicines given internally without effect; this leg was three or four times the size of the other, there was a constant, very offensive discharge from the hoof; more than half way up the hough was completely covered with pustules, which by Farriers, and others, are called grapes, some as large as a small Walnut; others less. The slightest friction or stroke from the other leg, produced the most copious bleeding; there was a very disagreeable stinking discharge from the heel; the inflammation in the leg was very violent, which I ordered to be fomented several times a day, for ten days; and gave him a dose of physic, and occasionally a diuretic, or urine ball. In about a fortnight the inflammation was sufficiently abated to admit of the pustules being removed, which I dressed every day with butter of Antimony applied

plied with a feather, this powerful caustic occasioned a considerable slough of the grapes, if I may be allowed the expression ; these pustules are, in some countries, called anberries ; a dose of physic was given about once in three weeks, and the berries dressed for about another week, with the butter of Antimony, when a third dose was given, and all the pustules seared away with a large firing iron made red hot, several of them, which appeared not to occupy much space at their roots and which were loose, I cut off, with the edge of the hot iron, and seared the external surface with the flat side of it ; this caused the pustules to slough, at least one eighth of an inch in thickness, each time of applying it. The last time of its application, I performed it in the same manner, as if there had been no such disease existing in the leg, as the grease ; I drew perpendicular lines from the upper part of the disease, down to the hoof, within about one fourth of an inch of each other, considerably deeper than I do in any common mode of firing for sprains, &c. In about three weeks, found it necessary to repeat the firing in straight lines as before, in the intervals between the former lines, and at the same time, firing transverse lines about one fourth of an inch distant from each other quite round the leg from the upper part of the disease to the hoof, and completely through every remaining pustule. I then gave him another dose of physic, and turned him out.

In about five weeks he was put to his usual employment ; the leg was not reduced to its original healthy size, but the enlargement was very trifling, with very little blemish, and he was perfectly sound.

I beg leave to observe, that those who saw this horse, whatever pretensions they might have to the knowledge of horses in general, were of opinion, that this could never be cured, and after he was cured, expressed their great astonishment.

A similar

A similar case came under my care, in a horse belonging to Charles Brandling, Esq. at Middleton, in Yorkshire, which I treated in every respect in the same manner, and with the usual success. These were the two most inveterate cases of grease I ever attempted to cure, and by far the worst I ever saw removed by any practitioner in the Veterinary art. From the above mode of treatment, any person may gather sufficient information to cure his own horse, or instruct a provincial Farrier how to treat the case.

SYMPTOMS, CAUSE, AND TREATMENT.

DROPSY may be local or general, and may proceed from a variety of causes; a dropy in the cavity of the thorax is called hydrops pectoris; when in the abdomen it is termed an ascites; and when in the cellular membrane of the brain it is called hydrops cerebri. When in the thorax, hydrops is, for the most part, a local disease, and I have never seen a case of this nature, except where it had proceeded from some external accident, wounding some of the vessels of the thorax, or the lungs.

Hydrops of the lungs is a difficultly at breathing; small, and apparently obstructed pulse; loss of appetite; urine very small in quantity; weakness; thirst; and a little fever; upon pressing the hand upon the side of the breast the water may be felt to gush against the hand, but with more

DROPSY.

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SYMPTOMS, CAUSE, AND TREATMENT.

DROPSY may be local or general, and may proceed from a variety of causes; a dropy in the cavity of the thorax is called hydrops pectoris; when in the abdomen it is termed an ascites; and when in the cellular membrane anasarca. When in the scrotum, hydrocele, but this last species of dropy seldom happens to horses, for I have never seen a case of this nature, except where it had proceeded from some external accident, wounding some of the superficial lymphatics, the scrotum itself, or parts contiguous.

Symptoms of hydrops pectoris are, a difficulty of breathing; small, and apparently obstructed pulse; loss of appetite; urine very small in quantity, weakness; thirst; and a little fever; upon pressing the hand upon the side of the breast, the water may be felt to gush against the hand, but with more
Violence

violence in the act of expiration, than during inspiration. Dropsy in the abdomen, called ascites, does not vary much in symptoms from the former, only that the whole cavity of the abdomen, from the great collection of fluid, is distended to an extraordinary size.

The symptoms of anasarca, general or local, are preternatural swellings in the parts most affected; this collection of watery fluid is caused by an effusion into the cellular membrane, and the water passes down to the legs or other parts, the skin pits, or is indented by the pressure of the finger, but the indentations fill up again in about ten minutes after the pressure is removed. There is another species of dropsy to which horses are generally very subject, and which Farriers have very erroneously called Water Farcy. It first appears in hardish knots under the skin, about the bigness of a horse bean, attended by a little inflammation and itching, causing the horse to rub himself against a post, stall, &c. these tubercles continue enlarging, sometimes, to the size of a pigeon's egg, and lastly, break; and from which issues a living animal or hydatid of an oval figure; when the cyst containing this insect is broken, a transparent fluid escapes, and if the insect be taken out, it leaves a cavity in the horse's flesh between the muscles and skin, of the original size of the hydatid. This little insect when taken out of the skin, in its vesicle, is perfectly alive, but not able to move its body; it has a small dark grey head, and several feet; the head appears to be about the 500th part of the size of the body. Of the production, or generation of these hydatids I have not hitherto been able satisfactorily to inform myself.

The causes of dropsy in horses, are many and various, as well as in the human

human subject; we are well assured that this disease, is nothing more than a preternatural collection of water in the cellular membrane, in cysts, or the different cavities of the body, arising sometimes from obvious, at other times from unknown causes. According to Dr. Rotherham's opinion, a quantity of water may be taken in, not by drinking, but by absorption from the atmosphere, and produce dropsy. Surely, if this may be admitted as a cause of dropsy, in the human subject, which is constantly protected against cold, damp air, &c. by cloaths and the like, it is natural to infer, that this may be one unavoidable cause in the horse, which is so frequently exposed to cold and moisture, &c. It is also readily admitted, that a rupture of the lymphatics, or the lacteals, has occasioned a dropsy in the cavity of the abdomen.

Too copious bleeding, particularly in fevers of the hectic kind, seldom fails of producing serous extravasation in the legs, or anasarca; sometimes local, or encysted dropsy. Strong and repeated blisters very frequently occasion a dropical disposition in the legs, and hocks of horses, and more particularly when applied at, or when just taken up from grafts. Punctures with forks, or other sharp pointed bodies, in the joints, particularly the hock, occasion a watery effusion in that part: punctures in the belly or sides, bring on hydroptic intumescence there. Strong drastic purges afford another very common cause, but more particularly when horses are physic'd immediately after they arrive from grafts, when the whole system is in a weak and relaxed state. Inactivity is a very common cause of anasarcous swellings in the legs, which frequently prove very hard to remove.

Long confinement in the stable, retards the circulation in the lymphatic vessels of the limbs, producing œdematous swellings, and plainly indicates neglect in respect to friction with the brush, and proper exercise.

Case 1.

A DROPSY in the whole inferior surface of the abdomen, or belly, in the General's troop, in the 11th Light Dragoons, was occasioned by a fork being thrust into the flank of the horse, and though the wound was not above 3-4ths of an inch deep, it was suddenly succeeded by pain, and a most violent inflammation extending about twelve inches in diameter; in two days, the inflammation subsided, but the swelling increased very fast, the pits made by the finger, as before-mentioned in dropical cases, remained for ten or twelve minutes, the horse became feverish and weak, urine small in quantity, and of a transparent red colour; finding the swelling increasing every hour, I gave him one of the following diuretic balls, viz:

Rosin, one pound,

Nitre, two ditto,

Oil of Juniper, two ounces,

Venice Turpentine, eight ditto,

Formed into thirty balls.

This was the second night after the accident; the next morning the swelling was still greater, it had spread from the flank, over the whole surface of the belly, to the fore leg, and into the breast; I repeated the diuretic ball, and gave one morning and night for two days; caused him to be walked out an hour at a time, three times a day; and the hardest friction that could be employed by the hands of two men at a time, three hours more in the course of the day, so that six hours in the day were spent in exercise and friction; and in the interval, four boards, connected together with leather, broad enough to cover the whole external

ternal surface of the abdomen, were confined to the belly by three furchingles buckled round the horse's body, which acted as a very powerful compress upon the abdomen. I may safely say, that the bottom part of the abdomen was diminished, in three days, at least eight inches. I punctured the abdomen in twenty or thirty places with a lancet, every day, and continued the above treatment till the morning of the fifth day of the disease, giving him one of my cordial balls morning and evening; when the swelling was partly subsided, and the horse in a state of convalescence. I then found it expedient to discontinue the diuretics for a day or two, and gave one of the following balls morning, noon, and night:

Take of Peruvian Bark, two pounds,

Opium dissolved in Spirits of Wine four ounces,

Made into sixteen balls with treacle.

I continued the friction, exercise, and compress, as before; and on the seventh and eighth morning, gave another of the diuretic balls; but which were from this time discontinued, and the bark balls substituted, every night and morning, for five days, along with walking exercise, for half an hour at a time, twice a day; the friction was also continued, and the compress, as before-mentioned, constantly applied, after the friction; and though this was one of the most alarming cases of the kind I ever saw, the horse perfectly recovered in three weeks from the attack of the disease.

REMARKS.

I never allowed the horse to drink more than two quarts of water a day,
for

for the first five days of the disease, and increased it only a quart a day, as he recovered, and as the dropfical symptoms abated. His food was dry Bran, Oats, and sweet Hay.

Case 2,

OF anasarca, in a troop horse in the 11th Light Dragoons, and which was much more alarming than the former, as it was a case of general dropsy; the horse's nose, legs, chest, and abdomen were all equally swelled, attended with some degree of fever, loss of appetite, and great debility. From the success derived from friction and compress, in other cases of a similar nature, I was induced to employ them in this, with the use of the same diuretic balls, which I gave as in case 1. adding Calomel 15 grains, and gave one night and morning for four days, and in the middle of the day one of the bark and opium balls. From the debilitated state the horse was in, I was not able to give him so much exercise as I did in the former case, instead of which I ordered the friction to be almost incessant for eight or ten hours in the day, I also gave him four quarts of the following decoction daily, with a horn, namely, Oak Bark six pounds, put into twelve quarts of strong ale, letting it simmer two hours over a slow fire, and straining it for use. I afterwards gave him one of the stimulating cordial balls every night and morning for twelve days, and at the expiration of that time he was restored to health.

DROPSY.

DROPSY.

THE hydatids before described admit of an easy cure, by letting the pustules come to a head, or allowing the skin to be first nearly ready to break, and then squeezing out the hydatids; after which, a drop or two of Spirits of Turpentine being dropped into the apperture, will soon stimulate the growth of parts destroyed by the irritation of the animal; and where there is a rising of the skin, yet where it does not appear likely to break, a few drops of Spirits of Turpentine upon the swelled part, will immediately destroy the living animal; this, with a dram or two of Calomel, given at the interval of a day or two, has always sufficed in this species of dropsy.]

YELLOW, OR JAUNDICE.

PERHAPS few diseases incident to horses have puzzled the practitioner, or the Farrier, more than this, though in fact, it is one of the simplest diseases in nature to cure, unless it proceed from wounds in the region of the liver.

SYMPTOMS.

YELLOWNESS in the eyes and mouth, sometimes in the tongue, urine yellow or high coloured, weakness in the eyes, pulse quick, costiveness, great debility, dung paler than usual, loss of appetite, sometimes restlessness.

COMMON CAUSE.

INFLAMMATION of the liver, spasm, biliary concretions impacted in the gall-duct, obstructing the passage of the bile, &c. and I have reason to believe, that external injury done to the contiguous parts, is a very frequent cause of this disease, as I have observed, that there are more waggon and Farmer's horses, that have this disease, than any other kind of horses, and from the great cruelty exercised by the managers of waggon and cart horses, particularly when these poor animals are at a dead stand with a heavy load, the whip being unmercifully applied, and the thick end of it sometimes repeatedly thrust against the different, and most sensible parts of the belly; and what tends
more

more to corroborate my opinion, that external contusions, &c. may be a frequent cause of the yellows, or jaundice, is a circumstance respecting a dog, belonging to Captain Diggins, of the 11th Light Dragoons, which fighting with another dog, received a great number of wounds and contusions about his body, particularly in the right hypochondrium, where the liver is situated; this being a favorite dog, and being very ill from the wounds he received, Captain Diggins desired me to look at him, when I found him unable to walk, or open his mouth or eyes, and he shewed all the symptoms of a most inveterate jaundice; he was a white dog in his coat, but his skin was then turned as yellow as ever I saw the skin of the human body, in the worst stage of the jaundice.

As I have mentioned dogs, I beg leave to say a few words more upon the subject, and as most sporting gentlemen are as fond of their dogs as of their horses, it may prove equally satisfactory; and as I have shewn one cause of jaundice in the dog, I shall go on with the treatment; bleeding is one of the most essential parts of the cure of this disease in horses, for which it might be natural to infer, that the same practice would prove useful to dogs, in the same situation; but I am sorry to add, that the case of this dog was so desperate from the violence of the cause, his neck, head, body, &c. being so much swelled, that bleeding was impracticable, the inflammation was so excessive in those parts, that I ordered him to be fomented with flannels, wrung out of hot water several times a day, and gave him one of the following pills night and morning, for six days.

Calomel and Opium of each three drams,
Made into twelve pills, with extract of Bark.

AT which time the dog was able to see and walk about, the yellow hue disappeared very fast, his lost appetite was restored, and he very quickly recovered. I take the liberty farther to say, that the dog which had fought with the one just mentioned, and which belonged to Lieutenant Bullocks, and had so greatly wounded Captain Diggins's dog, fought with another dog in about a year afterwards, which wounded him in his head and hypochondrium, near the liver, and which brought on the Jaundice, as bad as in the case of Captain Diggins's dog, indeed I may say something worse, as it was not in my power to save him.

Since that time I was sent for to another dog, which had the jaundice, from the same cause; several holes were bitten in his right side, by which the liver was affected, and he died, which gave me an opportunity of discovering the cause of his death, by dissection; when I found several ulcers in different parts of the liver, the bile mixed with blood in the vessels of the liver, and the biliary passages were almost impervious to air, as I introduced a blow pipe without being able to obtain more than a temporary passage, and that with difficulty; but previously, there had been a great quantity of bile extravasated out of the biliary passages, &c. into the duodenum, or first intestine from the stomach, but very little was regurgitated into the stomach, which is found very frequently to be the case in this disease in horses. From this demonstration, I think, it is fair to conclude, that contusions on the sides of horses, or of any other animal, adjacent to the liver, may occasion the jaundice; and when I have been called in to cases of jaundice, I have suspected this to have been the cause, especially if there were proofs of the animals having been treated in the manner above-named, and that the disease had a fatal tendency; for, as I mentioned before, unless it proceed from wounds, &c. in the sides,

sides, or parts adjacent to the liver, it is, in general, a disease easily curable; but when from contusion, &c. it requires quite a different treatment, which will be mentioned hereafter under the title of remarks.

Case 1.

A HORSE belonging to Colonel Carnage, in the 11th Light Dragoons, in 1798, had this disease, and it proved the most violent case that had ever come under my care.

SYMPTOMS.

THIS horse was remarkably yellow in his mouth and eyes, accompanied with an uniform high degree of heat, or inflammation; his pulse frequently at ninety five; very costive, with the greatest degree of stupor I ever saw in any horse in this disease; loss of appetite, his urine of a deep yellow, apparently tinged with blood; his dung very hard, small, and covered with a bloody mucus; his being a waggon horse, gave me reason to suspect that his disease might proceed from the before-mentioned causes, namely, wounds or contusions on his sides, though no appearance of either could be discovered,

TREATMENT.

I TOOK six quarts of blood from him, and placed a rowel in his chest,
and

and another in his belly a little to his right side, and gave him the following ball.—Aloes, 8 drams, made into a ball with soap; four hours after I ordered him plenty of water gruel, to drink, and gave him the following glyster; viz. warm water two quarts, purging salts, four ounces; and, as he was very costive, repeated it three times the same day; next evening the above purging ball operated plentifully, and when its operation was over, I gave him one of the following balls, and repeated it night and morning for four days:

Calomel one dram,

Opium half a dram,

Powdered Bark one ounce,

Made into a ball with Mucilage of Tragacanth. Next morning I found it necessary to take two quarts more of blood, and repeated the glyster as on the first day; at the end of the fifth day he was better, when his appetite was somewhat restored, his eyes open, and every dangerous symptom removed; still the yellow hue in his mouth and eyes remained, which proved that the bile had not been completely re-absorbed; finding it necessary to repeat the Calomel, I ordered the following dose:

Calomel, half a dram,

Opium, half a ditto,

Bark, one ounce,

made into a ball with mucilage as before; gave one every night and morning for four days longer, after which gave him the following purging ball. Aloes, five drams, made into a ball with hard Soap.

The fœces brought away by this purge, appeared to have a part of the coats of the intestines and bloody veins mixed with them, at the same time the

horse

horse was very much debilitated. In this case I thought proper to give him the following drink :

Powdered Bark, one ounce

Opium in warm water, two drams,

Mucilage of Gum Arabic, four ounces,

Mixed with two quarts of gruel, made warm, and repeated the same next morning ; from the above treatment the horse perfectly recovered ; and, alarming as the symptoms were from the violence of the attack, he was able to work within a month from the day he was taken ill.

Case 2.

A MARE belonging to Captain Brown, in the 11th Light Dragoons, taken at Hamptonwick, in 1797, this mare shewed all the symptoms as in case 1, her urine excepted, which did not appear to be affected, neither was she very costive.

TREATMENT.

I BLED her to four quarts, placed a rowel in her belly, and gave her the following ball : Aloes, six drams, made into a ball with Soap ; twenty four hours after I gave her the following ball :

Calomel and Opium, of each one dram,

Powdered Bark, one ounce,

Made

made into a ball with Mucilage of Gum Arabic, and repeated it night and morning, for three days, then left an interval of two days, and gave her four drams of Aloes made into a ball with soap; after this dose of physic had worked off, I repeated the Calomel balls as above for two days. From this treatment the mare recovered; but about a year after she went blind, which is accounted for, in the remarks upon this disease, and its terminations. For proper regimen, see remarks.—For the Case see page 181.

Case 3.

THIS horse was in Captain Brown's troop, 11th Light Dragoons, which shewed every symptom, as in case 1, but much more alarming, the fever was more violent, with great debility, which prevented my taking away the blood so commonly necessary in this disease; therefore, as the constitution could not afford to lose the usual quantity, I took only two quarts from him, the first day, and repeated it on the third, and again on the fifth, gave him glysters as in case 1, and the following ball the first day, viz. Aloes 6 drams, made into a ball with soap; and the four following days I gave this ball night and morning: Calomel two scruples, powdered Bark one ounce, Opium half a dram, made into a ball with Syrup of Buckthorn, at which time he was much recovered, though still weak. I discontinued the above ball for three days, and gave him the following—Aloes, four drams, made into a ball with hard soap; eighteen hours after it was given, he appeared much better; the next two days I gave him four ounces of Nitre, and four ditto of Sulphur in his mashes, at the expiration

piration of which, he was very much recovered, only the yellow hue remained in his mouth and eyes, with great debility. The yellow tinge in the eyes afforded an evident proof that the bile was not completely reabsorbed, for which I gave the following ball every night, for ten nights: Calomel half a dram, Opium half a dram, made into a ball with extract of Bark; nothing could effect a better cure than the above treatment; yet the horse went blind soon afterwards, and it is accounted for in the remarks in these cases.

After having laid down the general symptoms and common causes, and given several cases of this disease, I wish to conclude the subject with remarking, that I have, within these last ten years, had upwards of 120 more cases of this disease, and that the treatment laid down in these cases is the detail of my practice in every case of this kind, and I have the satisfaction to say, that I have never lost a horse in the jaundice. I must, however, beg leave to add, that the treatment ought to vary according to the violence of the cause and symptoms, and that a great number of cases of this kind have come under my care, in which I have done nothing more than take away from two to five quarts of blood from the horse, according to the strength, &c. and gave four drams of Aloes made into a ball with soap, and repeated it three or four days after; when the yellowness in the mouth and eyes was considerable, I have given a dram of Calomel, with three drams of Aloes made into a ball with soap, &c. and repeated it in about three days from the first, or as occasion required, with the greatest success, and in two or three instances of this disease, I have succeeded, by repeated venesection only.

PRACTICAL ADMONITIONS;

OR

REMARKS.

IN a slight case of the yellow jaundice, the horse's regimen may consist of his usual food and drink, but when more violent, no corn should be given to him, unless he be very much debilitated, and refuse every thing else, and in that case but very sparingly; but the food should be warm bran mash, warm water gruel, and his hay, which should be small in quantity, sprinkled with water an hour or two before it be given to him; and if he refuse all kinds of food, it will be necessary to make him some thick water gruel, and drench him with five or six quarts a day; as horses with this disease are always feverish throughout the whole stage, it is necessary to let a pail of warm water gruel stand constantly by him, that he may drink and wash his mouth when he likes.

In a state of violent costiveness in this disease, it is much safer to give the gentle purges mentioned in case 9 and 10, and repeat the glysters three or four times a day, after well raking, before Calomel is administered, otherwise it is likely to produce violent spasms, and increase the inflammation of the intestines, as well as bring on a salivation, or great foreness in the mouth; but after a passage is procured, the Calomel may be given with safety, to the quantity

tity of three or four drams a day; at the same time great care should be taken not to suffer the horse to drink cold water, or to eat such bran mash as have lain before him till they are cold; nor be walked out in an atmosphere many degrees colder than the stable in which he stands; therefore it becomes necessary to keep the stable in as equal a temperature with the atmosphere as possible, without risking the horse's taking cold by standing still.

I have great reason to believe that the jaundice is frequently caused by plethora, as horses are most subject to this disease, that are feeding on green clover, vetches, or any other green vegetable food; that this is the case I think is evident, from the great number of Farmers' horses that have this disease more than any others; and it happens at the time of the year when green vegetable food is most plentiful; that is, from July to the latter end of September. I have repeatedly observed, that in Farmers' stables, this disease has gone through the whole of his horses, except one; and, upon inquiry, I have found, that, perhaps, eight or ten, and sometimes more of these horses have gone constantly to grass, clover, or vetches, after their work was done; but the Farmer having a riding horse, kept him in the stable feeding on old oats and beans, when every horse that fed upon green vegetable food had this disease, and that the riding horse escaped. As the disease is so frequently fatal among horses, and from the same cause, viz. Plethora, I presume that a preventive will be acceptable, and if the following is strictly attended to, will most likely answer the purpose, however simple it may appear to those who have been in the habit of giving compositions of medicines, to my certain knowledge, of a direct contrary quality, which nothing but the powerful efforts of nature could have prevented from proving detrimental, or even a cause, instead of a preventive; the following has been found effectual in every case of that nature that has come under my care, and frequently

quently sufficed when symptoms have appeared ; therefore I must caution my readers against the repeated practice of giving hot spices, feeds, &c. under the appellation of comfortable balls and drinks, which may mostly be discovered by the taste. I do not mean to say that this is invariably the case, but it too frequently happens in this country, that the pretenders to the knowledge of farriery are mistaken in the cause and consequences of this, as well as most diseases incident to horses ; and this obscurity, and cruel violation of the true medical laws, and animal oeconomy, subsists too commonly among the publishers of books upon this subject ; as a certain author, of the name of Taplin, in page 266, in his eleventh edition, has the following words :

“ The more simple and least dangerous complaints passing under this denomination, arise solely from an obstruction in the biliary ducts, or in the gall bladder, situated between the two lobes of the liver, whose immediate purpose it is to assist in secreting the bile from the blood.”

Now the first part of this sentence I agree to, that the most simple and least dangerous complaints passing under this denomination, arise from an obstruction in the biliary ducts ; but then, that solely depends upon the cause of that obstruction. But the possibility of its arising from any obstruction in the gall bladder, I deny, upon the authority that a horse has no gall bladder. nor have I any satisfactory reason to believe that the gall bladder of any animal has any thing to do with the secretion of bile ; but that the gall bladder, in my opinion, is purely a receptacle of bile. Mr. Wood says, that he cannot assign a reason why a horse has not a gall bladder, as all other animals are furnished with

with it; Mr. Coleman, professor at the Veterinary college, has given a very satisfactory reason why, too long to mention in this work.

Turmeric, mentioned in the Edinburgh Pharmacopœia, as being of singular efficacy in the jaundice of the human body, does not answer any such purpose in horses, though prescribed by most authors, and given by farriers. I have administered eight ounces a day, for several days together without any perceptible effect.

Saffron, also prescribed by authors of farriery, has been celebrated as a leading ingredient in the cure of the jaundice in horses; but in every experiment I have been able to make, when given, in different cases, in large quantities, it has been without producing any sensible effect.

Rhubarb also, so frequently prescribed by authors of farriery, does not act as a purgative in horses.

No one need wonder that the jaundice in horses is so fatal, since the leading articles in the recipes in general have actually little or no effect on them; the medicines proper for the removal of the disease are omitted, or not known. Farriers in general do this through ignorance; and most surgeons who are authors, write from analogical ideas.

The jaundice proceeding from wounds and contusions in the body, &c. requires double the quantity of blood to be taken away, to prevent local inflammation

inflammation in the liver and contiguous parts; and a high degree of external inflammation to be raised by blisters, rowel, or setons, to counteract the excited inflammation of the liver, as I have great reason to believe that this mode of raising external inflammation in the contiguous parts, has frequently prevented the inflammation in the liver from terminating in suppuration or abscess; and I also find, that when this disease proceeds from wounds, &c. and does not prove fatal, it frequently terminates in a scirrhus liver, as I have several times experienced; and that, months after the horse has recovered of the jaundice, the whole system has wasted gradually, and from a cause unknown to those who could not dissect for it; so by way of a blind, they termed the horse rotten.

In the above state of diseased liver, the horse is generally stive through life; the yellow hue in his eyes never completely disappears, unless permanent blindness be the consequence; he is always feeble, or languid, his eyes either almost closed, without inflammation, or but very little open; or he stares very much, keeping his eyes fixed, apparently on some particular object, with the pupil wonderfully dilated, looking of a pale-blue colour; that part of the eye which generally appears white, puts on a yellowish hue; lastly, a complete cataract, and permanent blindness suddenly succeed.

The staring, or expanded pupil, is one sure criterion of an ensuing blindness, and though a temporary light be afforded him, it will not be of any long continuance. I have great reason to believe, that bile absorbed into the mass of blood, has a specific effect on the eyes of horses, as I find, that at least one third of these which are cured of jaundice, go blind within a year

year or two after, which is my reason for giving the large repeated doses of Calomel.

Sometimes the jaundice will be attended by violent purgings, in that case I have found great success from giving three drams of Opium, in a pill, night and morning, till it stop.

INFLAMMATION OF THE LUNGS.

SYMPTOMS.

COLD extremities, ears damp and cold, debility, loss of appetite, dry short cough, tongue sometimes hot and dry, increased action of the heart, pulse increased from its usual number of pulsations, which are in health from forty to fifty, in proportion to the violence of the inflammation, sometimes to eighty or ninety, and in a very advanced stage of the inflammation, to a hundred, and a hundred and ten; and all these symptoms increase in proportion to the degree of inflammation, that of the tongue excepted, which sometimes turns cold.

CAUSE.

Sudden transition from cold to heat, or heat to cold; violent cough; termination of general inflammation, or inflammatory fever; washing horses in rivers, ponds, &c. when in a state of perspiration; letting them stand in gateways or passages to cool; extraneous substances forced down the windpipe, &c.

Case 1,

OF a stallion the property of Colonel Childers, of the 11th Light Dragoons; the symptoms corresponded with the above in a most violent degree, pulse eighty; he was in very high condition, and not much debilitated. I took five quarts of blood from his neck, and gave him two ounces of Nitre, made into a ball with honey; then placed a rowel in the centre between the two fore legs, and another on each side of his chest, about sixteen inches, in an oblique direction, behind the first, towards his belly, so that the three rowels occupied a triangular space in the chest, of about sixteen inches. The operation of putting in three rowels, threw the horse into the most profuse sweat I ever saw in any horse.

The rowels previously to their being inserted, were dipped in Spirits of Turpentine, the stimulus of which, with the rowels, excited a most violent degree of inflammation, at least twenty inches in diameter, in eight hours. As the external inflammation increased, the symptoms above-mentioned decreased, the ball was repeated night and morning, for five days. Two yards of strong tape were tied round each fetlock, very tight, in order to determine as much blood to the extremities as possible. Every symptom of inflammation of the lungs was removed in forty-eight hours. The inflammation excited by the rowels was kept up three days, when one of them was taken out; and on the fifth day, both the others were also removed, and the balls discontinued; and about half an ounce of Nitre was given every day in a mash; his food was warm mashes of bran, and his drink warm gruel, both rather small in
quan-

quantity; his legs were well hand-rubbed several hours every day, and the stable kept moderately warm.

REMARKS.

When the parts rowelled inflame and swell, in the space of six or eight hours, it is almost a sure criterion of success; but if not within the first twenty-four, then blistering on the side, and even firing, is the only probable mode of treatment that can give the least hopes of a cure; where rowelling, blistering, and firing fail in rousing inflammation, I never saw one instance of a horse's recovering. In a case of a horse belonging to Miss Stewart, on a visit at Mr. Pickard's, near Dorchester, in Dorsetshire, I employed the above treatment, (firing excepted) three rowels in the chest, and blistered with the strongest blistering ointment I could make; none of the rowels nor the blister, had the least effect, the horse died on the third day; when opening the chest, (Mr. Pickard being present) we found the lungs almost in a state of mortification. This horse shewed every symptom of Case 1. of which Mr. Pickard will bear testimony.

Case 2.

THIS horse was the property of the Right Honourable Lord Charles Somers, and was taken ill at Lord Digby's, Sherborne Castle, October 28th, 1798, with all the symptoms of the last case, but which were not so violent. I placed three rowels in his chest, as in Case 1, took away about four or five
quarts

quarts of blood, and gave him one of the following balls night and morning for three days;

Nitre two ounces,

Purging Salts half an ounce,

Made into a ball with Syrup of Buckthorn :

At which time the inflammatory symptoms in the lungs were chiefly removed, his legs and ears became much warmer, his mouth cooler and moister, his pulse, which before was 95, lowered to 48. I kept the rowels in eight days, then ordered them to be taken out, and one of the following balls given to him every night and morning for six days :

Nitre, an ounce and a half,

Sulphur, half an ounce,

Made into a ball with Honey.

On the 12th of November, this horse appeared very dull and heavy, but shewed no symptoms of his late disease, nor sickness of any kind, but his pulse was very slow, languid, and small; I rather suspected, from these symptoms, and a little cough, which I found by the Servant, that he generally had, little or much, to be something of a constitutional weakness, and concluded that something stimulating might be of service to him, I made him up twelve of the following balls, and gave one every night :

Caraway Seed, in fine powder, 3 ounces,

Cascarilla, Ditto, 2 Do.

Fenugreek, Ditto, 6 Do.

Best powdered Bark, 6 Do.

Extract of Opium, 2 Do.

Honey, a sufficient quantity to form the whole into twelve balls.

After

After taking fix of these balls he was much better, and fit to perform his journey to London, which he did in five days, with much more than his usual vivacity. As Lord Charles was in the habit of driving his horse sixty miles a day, for several days together, I need not say any thing further about the cause. See common causes in Case 1.

Case 4.

COL. LYON's mare, 11th Light Dragoons, October 30th, 1798.

SYMPTOMS.

A SHORT dry cough, tongue hot and covered with mucus, extremities cold, ears cold and damp, her pulse about 65, but no alarming symptoms to indicate the least danger, therefore, as the disease was not violent, there was no occasion for very powerful remedies.

TREATMENT.

I BLED her to about three quarts, put a rowel in between her fore legs, and gave her one of the following balls every night for four nights, and employed the tapes round the fetlock joints, as in Case 1, taking them off twice a day, and causing her legs to be well hand-rubbed. This disease required no farther treatment.

Nitre, one ounce,

Purging Salts, half an ounce,

Common Soap sufficient to form a ball.

In-

INFLAMMATION OF THE LUNGS

AND

SORE THROAT.

THIS horse belonged to the Bishop of Durham. On the first attack of the disease, the horse had a cough and fever, or general inflammation, his head, ears, body, and extremities, became all at once excessively hot, his pulse 70, and very full. I took four quarts of blood from him that day; and as his body was quite open, I gave him the following diaphoretic ball every night and morning for four days:

Tartar emetic, one dram,
Camphire, one dram and a half,
Extract of Opium, one dram,
Flower of Sulphur, half an ounce,
Made into a ball with honey.

After he had taken eight doses his cough was better, and he appeared quite well for a day or two, when the disease changed suddenly, and he became affected with very alarming symptoms of local inflammation of the lungs and throat.

I BLED him again, and blistered him on each side of his chest, as broad as a common plate; also under his jaws, and upon his windpipe, half way down his neck, and kept up the stimulus of the blister for three days by applying some fresh blistering ointment to the parts; the third day, he was much better, every symptom of inflammation being removed to the great satisfaction of the Bishop, who, from his being a favorite horse, visited him almost every hour. In about six days the horse began to eat bran mash, with some corn, and was led about the park, and ate grass plentifully.

PRACTICAL ADMONITIONS.

BE careful of bleeding horses on the first attack of fever, as it is generally called, though not generally found to be such; for sometimes the fever or inflammation comes on with a shivering fit, the horse's flanks are drawn up, his ears and extremities cold, with an universal cold sweat, his eyes dull and heavy, his joints in a state of vibration, which symptoms indicate direct debility. By bleeding, under these circumstances, I believe that nine horses are killed out of ten; particularly as Farriers are as fond of copious bleeding in *direct*, as they are in *indirect* debility, or plethora. I must beg to be brief in this part, as my time will not permit me to say much more upon the subject in this book, and have only to add, that bleeding, even in a state of plethora, unless performed with judgment, may be productive of much injury; bleeding under the direct debility, will bring on such irrecoverable weakness, that perhaps all the stimulants that can be given, will not be able to remove; therefore much consideration, in any stage of fever or inflammation, is requisite.

Case 5.

A HORSE in Captain Sleigh's troop, shewing the following

SYMP-

SYMPTOMS.

Slight cough, loss of appetite, extremities, and ears cold.

TREATMENT.

I only put two rowels into his chest, took away three quarts of blood, and gave him three drams of Aloes, made into a ball with soap; bran mashes to eat, and warm water to drink, and kept him moderately warm; this horse was perfectly well in eight days.

Case 6,

Capt. Sleight's troop—the Trumpeter's Grey Mare.

THIS is one of the desperate cases mentioned in my remarks, case 1. I observed, that when inflammation cannot be excited by rowels, blistering, &c. all hopes are then at an end; two rowels, and twice blistering had been employed without any appearance of external inflammation; also copious bleeding and purging, all without the least success; the cough continued, with difficulty of breathing, and appearance of a broken wind, loss of appetite, and symptoms of approaching dissolution; still I had recourse to firing, five deep lines, twelve inches long, were made on each side of the chest, about an inch apart; rowels, and repeated blisters had failed, the firing excited a very violent inflammation in the parts, which almost immediately relieved the laborious breathing, and the symptoms of violent inflammation in the lungs; the cough was very troublesome. I gave her a pint of the following mixture three times a day, for three days:

Opium, one ounce, dissolved in three quarts of hot water; to which was added, Vitriolic Acid, one ounce; every symptom of cough and irritation in

the throat was removed in six days; and the mare perfectly well in ten days from the attack of inflammation.

REMARKS.

I would recommend all practitioners of the art of Farriery, never to delay firing, as above, if the rowels and blisters should not operate within twelve hours after their having been applied; at the same time never to forget to tie the tape or cord, as is mentioned in case 1, round the fetlock joints, as tight as possible, taking them off about twice a day, and rubbing the legs well with the hands, and putting them on again.

The following I have given to a number of horses with inflammation of the lungs, when the cough has been very troublesome:—

Aniseeds, one pound, simmered over the fire in a gallon of water for three hours; then add Nitre, two pounds; Opium, previously dissolved in a quart of hot water, two ounces; give the horse half a pint every three or four hours. I have found this simple composition to answer every purpose in stopping a violent cough. I have sometimes added half a dram of Oil of Pepper-mint, to the single half pint, with great advantage.

Case 7,

A HORSE belonging to Serjeant Cordiroy, shewed all the symptoms of the last case, but not so violent. I bled him to four quarts, and placed two rowels in his chest; blistered on each side of his chest twice; as the cough was not severe, I did not find it necessary to give him any thing more than Nitre
finely

finely powdered, two ounces; Sulphur ditto, two ounces, mixed and made into a ball with treacle, to be given morning noon, and night, for five or six days; along with warm water, and warm bran mashes. This horse was very much reduced in flesh, by the bleeding, the blisters, rowels, &c. and being left with a delicate appetite, probably owing to the digestive powers of the stomach being impaired by the disease; and knowing that strong bitters are the best stomachics, or restoratives for horses in cases of lost appetite, I gave him three drams of Aloes, made into a ball with soap, and repeated it four days after. From the above simple treatment, though a formidable disease, it was perfectly removed in three weeks.

Case 8,

Crab's horse, in Captain Barton's Troop, 11th Light Dragoons.

THIS being a case simple in its nature, required little more than bleeding to about two quarts, and a rowel in the chest, repeating the bleeding in about four days from the first, and giving the following gentle purging ball: Aloes, three drams, made into a ball with soap; the horse was allowed bran mashes, with an ounce of Nitre, and half an ounce of Sulphur, in each, night and morning for a week. I found, by giving the Aloes, that his appetite was restored, which had been lost for several days, his pulse became more regular, and the horse perfectly well, a little cough excepted; for which I gave him the following for four successive nights:

An-

Aniseed Powder, and
 Nitre, of each half an ounce,
 Camphire, two drams,
 Extract of Opium, one dram,
 Made into a ball with treacle.

The cough being cured, the horse returned to his duty in three weeks.

Case 9,

A HORSE in Major Thomas's troop, 11th Light Dragoons.

THIS case, 1, 6, and 7 excepted, was the worst I ever saw to recover.

SYMPTOMS.

SEVERE cough, great restlessness, laborious breathing, much debility, and every symptom of case 1, with his extremities excessively cold, which is a sure preface of a violent inflammation of some internal part or other, excepting it be accompanied by a general cold fit, as frequently happens to horses hot off a journey, suffered to stand in the draught of a cold passage, or gateway to dry, before they are cleaned, or which have been taken to a river or pond, to wash off the dirt, and then allowed to stand till they are dry. In these cases the extremities will be equally as cold as in cases of local inflammation of some internal part; and I find from accurate observation, that cold extremities afford one of the most alarming symptoms attending any internal inflammation; but which may be remedied by ligatures, or a yard or two of strong tape bound as tight as possible round each fetlock joint. This treatment, by what is termed

ed revulsion in the blood, &c. will, by compressing the veins, retard the free return of the blood to the heart.

TREATMENT.

I BLED him to five quarts, placed two rowels in his chest, blistered him on each side, having the hair first cut off eighteen inches in diameter; the blister was well rubbed in for half an hour, assisted by holding a broad hot iron close to the part, tied the ligature round the fetlock joints, as in case 1, &c. and gave him the following gentle purging ball:—Aloes, three drams, made into a ball with soap. I repeated the bleeding two days after, and as his cough was troublesome, gave him one of the following balls night and morning, for three days:—

Camphire, and Extract of Opium, of each one dram,

Nitre, one ounce,

Formed into a ball with Treacle.

During which time the horse had ate nothing, and was remarkably weak; but the inflammation being removed, and the cough but very trifling, he very soon recovered his strength.

REMARKS.

THIS disease is often prevalent, and frequently fatal; I have had a great number that required nothing more than bleeding, and rowelling, repeated as occasion required, and which should always be the first indication of cure of an inflammation of the lungs; as without bleeding, no medicines whatever will be of any service; but the blistering and firing depend on the violence of the attack, or the progress of the disease; as in slight inflammation of the lungs

in the human body, bleeding and a gentle blister on the side, breast, &c. will perform a cure ; but in a dangerous one, setons, cupping, &c. become necessary.

The above treatment is not only simple and easy, but I think the most rational, as well as oeconomical : and I trust, that the success attending it, will induce my readers to adopt early measures, a short delay being dangerous, and the cure depending on the application of a speedy remedy.

The extremities becoming suddenly cold after the disease has been of some days standing, is a very alarming symptom ; and if firing has not been employed, as before-mentioned, in the chest, there are no hopes of success left ; nor even then, if it has not had the desired stimulating effect. A cold sweat breaking out about the flanks, and a voracious appetite, are sure criterions of mortification having taken place, and death approaching.

Sometimes a violent discharge from the nostrils comes on suddenly, and the difficulty of breathing, and other symptoms of inflammation of the lungs are removed. At this period Farriers often conclude that the horse is recovering, saying the cold is broken ; but in all these cases, I would recommend the horse to be removed from other horses, as the glanders are frequently the consequence of an inflammation of the lungs.

Having given the symptoms, cases, and treatment, of nine cases of inflammation of the lungs, I conceive that a greater number would be superfluous ; therefore I shall conclude the subject of this very dangerous disease, in assuring my readers, that in the early part of my practice, I did not pursue

fue

use the same mode of treatment, *i. e.* by exciting external inflammation by rowels, blisters, firing, &c. consequently I lost some valuable horses; but since I have adopted the above treatment, I have been very successful in saving, at least eighteen out of twenty.

INFLAMMATION OF THE SYSTEM;

CALLED

General Inflammation, or Inflammatory Fever.

AS it is evident, that this inflammation, or fever, is produced by all the causes of a local inflammation of the lungs, and is attended with symptoms of debility, languor, loss of appetite, high coloured urine, small in quantity; the alvine discharges much the same as in the recent state of any fever or inflammation of this nature; therefore to follow the practice of cleansing the first passages is quite immaterial, any further than to give warm bran mashes, &c. sufficient to keep the body open. It is very easy to discriminate between general inflammatory fever, and local inflammation in the lungs, intestines, stomach, &c.

(See symptoms of inflamed lungs.)

In an inflammatory fever, or general inflammation, the extremities retain the same temperature as that of the body, with a sense of general heat and debility, mouth hot and clammy, pulse soft, frequent and small; the eyes inflamed and watery, sometimes quite closed; the horse seldom refuses all kinds of food, but will always eat grass, (if offered him) clover, vetches, &c. till nearly

nearly the approach of death, he drinks frequently, but sparingly. The first attack is generally slight, and yields to bleeding, and a gentle dose of aloetic physic, and a few ounces of Nitre, given in bran mashes. If the attack should be violent, it may be necessary to bleed to the quantity of three or four quarts, according to the strength of the horse, and to give six or eight drams of Aloes, made into a ball with soap; and to repeat the bleeding according to the violence of the inflammation.

Sometimes the horse is quickly destroyed by the increased action of the blood vessels affecting the brain, attended by convulsions and delirium, producing symptoms of that alarming disease, called the staggers; if the horse survive four days, under symptoms of inflammation of the brain, from the above cause, and a free passage be procured by laxatives, &c. no great danger is to be feared. If he remain costive till the 4th or 5th day of the inflammation of the brain, without any passage, little hopes are to be expected of his recovery, though he may live 12 or 16 days apparently in the same state; therefore a passage should be procured, even at the risk of the horse's life; if the purges given to him should act with great violence, and threaten the life of the animal, as they sometimes do, three grains of Opium given twice a day will stop their action; at the same time blisters should be applied to the forehead and temples; glysters should also be repeatedly administered.

I have seen a great number of cases of fever where the first attack commenced with a cold shivering fit, attended by great debility, trembling limbs, coldness and stiffness of the joints, loss of appetite, and a slow and languid pulse. I have known several instances of this cold shivering fit, with all the above symptoms, continuing for 12 or 16 hours together, without change, previously to my arrival at the place where the horse was quartered.

TREATMENT.

Under the above circumstances, I considered relaxants to be the most proper medicines in the early stage of the fever; and gave the following ball, and repeated it every 4, 5, or 6 hours, according to the effect of the first or second, viz :

Tartar Emetic, one dram and a half,
Camphire, one dram,
Nitre, half an ounce,
Made into a ball with Treacle.

These medicines have the effect of relaxing the system; and if the horse be kept well cloathed in a stable of moderate temperature, will produce gentle perspiration on the skin; which is the effect desired from them. The perspiration may be assisted by warm bran mash given to him in a bag, into which the horse's nose is to be put, that he may receive the steam.

INFLUENZA.

IN addition to my treatment of general inflammation, and of inflammatory fever, I must beg leave to refer back to the year 1798, to that very fatal disease so universal among horses of all ages and descriptions, termed an epidemic inflammation. This disease was much more prevalent among Farmer's and Post horses, than any others, which might be the necessary consequence of high feeding; post horses being in the habit of eating a great deal of corn, and Farmer's horses a vast quantity of grass and clover, in the two months of July and August, producing plethora. The symptoms and progress varied much from the troop horses in the 11th Regiment of Light Dragoons. I was called in to a great number of horses belonging to people in Reading, and its vicinity, I believe to more than one hundred cases; the chief symptoms were as follow, viz: Stupor, and heaviness, eyes inflamed and watery, mouth hot and clammy, breath hot, respiration quick and irregular, loss of appetite, body, head, and extremities, all in one uniform excessive heat; in many horses the pulse as frequent as 70 or 80 in a minute.

In most of these cases I found it necessary to bleed largely, (*i. e.*) from three to five quarts, according to the age and constitution, and to give the following ball, viz:

An-

Antimonial Powder, one dram and a half,
 Camphire, one dram,
 Treacle sufficient to form it into a ball.

This sufficed in most of the inflammatory cases; but when the symptoms remained for several days, and the above treatment had failed to reduce the inflammation, I gave one of the following balls every night and morning, for three or four days, viz :

Tartar Emetic, and Camphire, of each one dram and a half,
 Flowers of Sulphur, and Nitre, of each half an ounce,
 Treacle sufficient to make them into a ball.

In most cases these balls had a very good effect; but when I had recourse to them in the first stage, they succeeded still better, which I frequently had, when there was no costiveness, and when the pulse did not indicate any extraordinary degree of plethora: but if any tendency to costiveness be discovered, and the pulse run high, *i. e.* up to 65 or 70, bleeding, purging, and rowels, must be employed, and more particularly if the plethora or inflammation proceed from eating too much grafs, clover, or vetches, and which has been the leading cause of most of these cases; for it is evident that horses are more subject to plethora from eating food of this kind.

The termination of this inflammation among Farmer's horses, was as various as the symptoms; but if it were not brought to a crisis in two days from the attack, chances ran very much against the recovery of the horse; as it generally terminated about the third or fourth day in a local inflammation
 of

of the lungs, trachea, or œsophagus, which generally proved fatal. To guard against such consequences, I bled plentifully on the first attack of the inflammation, and repeated it according to the impetus of the blood and the succeeding symptoms; with caution at the same time not to bleed too freely, where there was only a general inflammation, for such practice has frequently brought on hectic fever, which is but seldom removed in horses. On the other hand, where there was a certainty of the general inflammation having partly, or altogether terminated in a local inflammation in the trachea, or lungs, copious bleeding, with rowels in the chest, and blisters, and even firing the sides, were necessary, in the employment of which I have had great success, as may be seen under that head.

The symptoms attending the troop horses in the 11th Regiment of Light Dragoons, in which I have had the honour to serve as Veterinary Surgeon, varied much from those kept upon grass, clover, vetches, &c. as out of 249 horses taken ill in the month of July, 1798, and 112 in the month of Aug. as may be seen in my returns to the Veterinary College, not above ten cases appeared to me to require bleeding, the symptoms being in general, as follows, viz. cold with shiverings, loss of appetite, and great debility, pulse quick and very small, violent coughing, great discharge of mucus from the nostrils, attended with sore throat. In some few cases I found symptoms of general inflammation, and in others shivering, with cold sweats, trembling of the limbs, and weakness in the whole system, pulse very small and slow, even down to 25 pulsations in a minute, urine small in quantity, and high coloured. Both these stages of fever have been termed by Farriers, and some others, *distemper*.

I must however beg leave to observe, that the treatment of the case attended

tended by cold shiverings, answered, with little addition, for those cases attended with cold sweat, in which the pulse was small and slow; as well as in the cases of quick and small pulse, also attended with shiverings. The following was almost invariably my practice on the first attack of the fever, if I may so call it, or epidemic inflammation; I gave one of the following balls night and morning for two days, viz.

Tartar Emetic, two drams,

Camphire, one dram,

Flowers of Sulphur, four drams.

Extract of Opium, two drams,

Tincture of Cardamon Seed, half an ounce,

Made into a ball with Treacle or Honey;

Allowing the horses plenty of warm water, hot bran mash, and water gruel; and keeping them warm with cloathes. I had repeated occasion to continue the above ball till the 5th or 6th day; when I found any difficulty of swallowing, or sore throat, I put a rowel under the jaw, or blistered the throat and glands.

The Bishop of Durham did me the honour to call me in to six or eight of his horses, every one of which shewed symptoms of general inflammation. Mr. Gerrard, brewer, in Reading, had one of his dray horses taken suddenly with the above symptoms; Mr. Smith, Mr. May, and several other Gentlemen in the neighbourhood of Reading, had eight or ten horses seized within a few days of each other, all of which, when I found the inflammatory symptoms run high, I treated as before-mentioned; and when I thought there was

no immediate preface of danger, but only a slight degree of inflammation, as was common in the first attack, I gave them the following ball, viz.

Tartar Emetic, two drams,

Camphire, three drams,

Honey or Treacle sufficient to make it into a ball;

To be given every night, or night and morning, for 3, 4, or 5 days together; in some slight cases 2 or 3 of the above balls sufficed; when in some more violent, I was necessitated to give 10 or 12 before I could remove the inflammatory symptoms; in which instances I was also obliged to take away small quantities of blood, and repeat the bleeding as the symptoms indicated.

FEVER.

The cases of fever are almost innumerable, which have come under my care and superintendence within the last ten years, and although my mode of treatment was, in the general, successful in the early part of my practice; I have altered it materially of late. I seldom bleed, unless the animal be very plethoric and fat, and his pulse as high as 70 or 80. The general success derived from the following ball, renders it, in general, unnecessary to bleed :

Dr. James's Powder, forty grains,
Camphire in Powder, thirty grains,
Conserve of Hip, or Honey, sufficient to form them into a ball.

When the inflammatory symptoms ran high, I have given fifty grains of James's powder, with forty grains of Camphire; and in some other cases where the constitution was delicate, thirty grains of James's powder, with twenty of Camphire; and in all the various degrees of strength of the ball, if there was any cough attending, I added 10, 20, or 30 grains of Opium to each ball, according to the strength of it. This well known fact, that these balls never fail, (if given at the commencement of a fever) is well established in all parts where I have practised, since I never lost a horse in a fever, or general inflammation, if called in before it had terminated, as it frequently does, in local inflammation of the lungs.

At

At the commencement of the fever, I generally gave one of these balls every four hours, till they excited perspiration, or the skin felt soft and damp to the hand; three or four are, in common, sufficient to effect this design; plenty of gruel should be given warm, after each ball; if the horse will not drink it, he should be drenched with a horn.

ON THE EYE

THE external appearance of the eye is familiar to the common eye; but the internal structure, functions and diseases are still but imperfectly understood by the commonality of practitioners in the Veterinary Art. A prominent and large eye is, for the most part, chosen by all buyers of horses without any attention being paid to its internal form or health; some horses have small depressed eyes, and which are very healthy; others very fine prominent eyes, unaltered; by the same rule there are prominent fine eyes, very good and healthy, and some unaltered, which, without a knowledge of anatomy, and the economy of the internal eye, people cannot be judges who they are found or otherwise. A contracted eye brow is a criterion of a termination of long standing inflammation of the whole globe of the eye; an opaque cornea is a symptom of a termination of inflammation in the anterior part of the eye; is generally the effect of local causes, such as blows, bites, dust, insects and other extraneous bodies to be removed by topical applications. It is frequently observed, that the whole anterior part of the globe of the eye is contracted and diminished; that the diameter of the cornea is reduced to two-thirds of its original dimension: The aqueous humor, in this case, with the other parts being removed, proves the existence of the absorbent system extending to the eye as well as other parts. A disease in the optic nerve, called

ON THE EYE.

THE external appearance of the eye is familiar to the commonest capacity; but the internal structure, functions, and diseases, are still but imperfectly understood by the commonality of practitioners in the Veterinary Art. A prominent and large eye is, for the most part, chosen by all buyers of horses, without any attention being paid to its internal form or health; some horses have small depressed eyes, and which are very healthy; others very fine prominent eyes, unsound; by the same rule there are prominent fine eyes, very good and healthy, and some unsound, which, without a knowledge of anatomy, and the œconomy of the internal eye, people cannot be judges whether they are sound or otherwise. A contracted eye brow is a criterion of a termination of long standing inflammation of the whole globe of the eye; an opaque cornea is a symptom of a termination of inflammation in the anterior part of the eye, is generally the effect of local cause, such as blows, bites, dust, insects, and other extraneous bodies, to be remedied by topical applications. It is frequently observed, that the whole anterior part of the globe of the eye, is contracted and diminished, that the diameter of the cornea is reduced to two-thirds of its original dimension: The aqueous humour, in this case, with the other parts being removed, proves the existence of the absorbent system extending to the eye, as well as other parts. A disease in the optic nerve, called

Gutta Serena, is very common to horses, as well as men, and is generally supposed to be the effect of the loss of susceptibility of its natural stimulus, *i. e.* the light; therefore an over-proportion of light suddenly thrown upon the part, in form of a lamp, in order to rouse the organs of vision into new action, may be useful.

Each important part of the eye has its peculiar disease, and each disease its peculiar cause, which the symptoms seldom fail to point out.

CATARACT.

CATARACT is well known to be an opacity in the chryſtaline lens ; the cauſes aſſigned are various ; ſome of the moſt learned of the faculty ſay it is a depoſite of lymph upon the lens ; others, that it is ſimply inflammation. I am inclined to believe that inflammation is the proximate cauſe.

Moon Blindneſs, as it is commonly called, is that periodical inflammation in one or both eyes, which recurs once every month or five weeks, leaving the eyes worſe every time, till at laſt they are loſt, and there is then no return of the inflammation afterwards. This inflammation I conceive to be inherent in the ſyſtem, and hereditary, and it ſeldom fails (in ſpite of the beſt remedies) to terminate in a Cataract, irremovable, except by couching, which never has the deſired effect in horſes, in conſequence of the difficulty of adapting glaſſes to the eyes ; it generally leaves the cornea apparently opaque, which is in fact no more than a thickening of that exquisitely fine membrane, called conjunctiva, which puts on a pale blue opaque appearance. Theſe are the moſt common diſeaſes incident to the eyes of horſes. The external film, or opaque coat covering the cornea above-mentioned, is conveniently removed by blowing into the eyes as much Calomel as will lie upon a ſilver penny twice a day ; fine Sugar, burnt Salt, calcined Alum, blue Vitriol in powder, levigated glaſs, and the like, have been generally uſed for this purpoſe ; but I prefer the Calomel.

MOON

MOON BLINDNESS.

SYMPTOMS.

REDNESS in the eye-lids, fulness in the blood-vessels, tears perpetually falling from the eyes, which are sometimes closed, with swelled eye-lids and general inflammation ; frequently slight fever.

TREATMENT.

Case 1.

A BROWN MARE, the property of Mr. Pasmore, of Doncaster, shewed every symptom above-mentioned, but in a mild degree, compared with some cases which have come under my care ; I passed a seton through the skin, about an inch and a half below each eye, occupying about one inch of skin ; I wetted the threads of the setons with Spirit of Turpentine, and caused them to be drawn backward and forward night and morning, and washed the eye with the following eye water, two or three times a day :

Rose Water, half a pint,
 White Vitriol, twenty grains,
 Tincture of Opium, one dram,

The mare recovered in about three weeks. I purchased the same mare about two years after, and had her in my possession about one year, and sold her perfectly sound, without any return of the inflammation. Where the inflammation has been confined locally to the external part of the eye and eyelids, no other treatment is necessary; where the discharge of water from the eyes has been copious and acrimonious, I have given six or eight ounces of Nitre a day, for several days together, with great success.

But if the inflammation extend to the anterior chamber, or internal part of the eye, as it frequently does, and lastly, terminate in what is termed by oculists, *Hypophagma*, or extravasation of blood in the anterior chamber of the eye, it may be inferred that it is not moon blindness, and admits of an easier cure, unless the injury has been so great as to have ruptured the cornea. Bleeding, to the quantity of two or three quarts, according to the degree of inflammation and strength of the horse, and a dose of purging physic, are generally found sufficient, with a poultice of bread and milk, which is most conveniently applied to the eye, by putting it into a bag made of soft linen cloth, and sewing it into the eye-hole of a hood. This may be renewed conveniently, by taking it off the eye, and pouring some fresh hot milk upon it, and when cold enough, applying it to the eye again, continuing the poultice till the inflammation subside.

HYPOPIUM has been termed a disease independent of the former, but it does not appear to me to be any thing more than the termination of inflammation into pus, or matter in the anterior chamber of the eye, and is rather an effect than a cause.

If

If matter be formed, bleeding should be avoided ; blisters on each temple, fetons under the eyes, and half a dram of Calomel made into a ball with soap, or mixed in a mash of bran, six or seven successive days, and after that a dose of physic, seldom fail to remove or promote absorption of all the matter in the anterior chamber ; but in cases where the matter has not been all absorbed, I have repeated the course of Calomel and the physic with great success. The chill should be taken off the water during the administration of all these medicines ; the stable should be kept free from wet litter and dung, of a moderate degree of temperature, and as dark as possible. I am sorry to observe, that through the opposition of people who ought to be interested in these instructions, but who have frequently and perversely acted diametrically opposite to them, the practice recommended has often failed, and the poor animal has thereby been reduced to a state of perpetual darkness.

PLEURISY.

PERHAPS my readers may be surpris'd at my not having given some cases of pleurisy in this work, but I conceive it to be too nice a discrimination between this disease and an inflammation in the lungs, for men who are not in a constant habit of the practice of physic, and that the most perceptible difference worth attending to, is, that the horse is more frequently lying down, and rising up suddenly, the inspirations are much shorter than in a local inflammation of the lungs; the horse is very frequently turning his head back, and putting his nose to the parts apparently most in pain, which to my knowledge has frequently given rise to Farriers and others to mistake an inflammation in the plura and lungs for a spasm in the intestines, commonly called the gripes; and great quantities of hot spices, gin, and other inflammatory substances have been given.

I have often found, in cases of this nature, after horses have died with what is termed the gripes, that there was a violent inflammation in the pleura; sometimes with but slight inflammation of the lungs, and other parts; and that probably might have proceeded from that kind of sympathy which is supposed to subsist between contiguous parts, or the inflamed pleura might have contaminated the lungs and neighbouring parts. But this discrimination is of no
con-

consequence, for the treatment necessary in one case, is required in the other; and the only difference I ever make is in the diet, and that chiefly in not giving the horse above half his usual quantity of water; not that water has any particular effect upon the lungs, but that the stomach being filled with water, which being specifically heavier than any other substance of its magnitude voluntarily taken into the stomach, acts by compressing the lungs, and forcing forward the diaphragm, or that partition which separates the heart, lungs, &c. from the stomach, intestines, &c. &c. and this is the only way in which I am able to account for the short respiration, particularly upon a full stomach; for the less air the horse takes into his lungs, the greater must the space be between the lobes of the lungs and the pleura, which in a state of inflammation would be irritated by their coming so frequently in contact; by the same rule, the more empty the stomach is kept, the more the diaphragm will recede from the lungs, and leave a greater space for them to perform their functions in, without offending the pleura.

TREATMENT.

Case 1.

MY readers may probably be surprised when I inform them, that in all my practice, only three cases of diabetes have come under my notice, and these were all troop-horses in the 11th Light Dragoons. The first was in Colonel Carnegie's troop, in 1796; I caught a therapy's skin to be constantly attended upon his back and joints and gave him the following ball night and morning:

Groom-Vinif, in the hour 18

DIA-

DIABETES.

SYMPTOMS.

GREAT thirst; the extremities sometimes, but not always, cold; fudden chills, and a frequent and copious discharge of urine.

CAUSE.

A Sudden check of perspiration, but generally too liberal an use of diuretics, or from their being of an improper kind.

TREATMENT.

Case 1.

MY readers may probably be surpris'd when I inform them, that in all my practice, only three cases of diabetes have come under my notice, and these were all troop-horses in the 11th Light Dragoons. The first was in Colonel Carnegie's troop, in 1796; I caused a sheep's skin to be constantly confined upon his back and loins, and gave him the following ball night and morning:

Green Vitriol, in fine powder, two drams,

Peruvian

Peruvian Bark in fine powder, six drams,

Purified Opium, half a dram,

Formed into a ball with Treacle.

At the expiration of six days, every symptom was removed.

Case 2 & 3,

TWO troop horses, while the regiment lay in camp, in 1798. The symptoms correctly corresponded with those mentioned in case 1, to which I referred for the treatment, and after giving 14 balls to the case 2, and 17 to case 3, no more of them were found necessary; but both the horses being a little costive from the effect of the Opium, I gave each of them four drams of Aloes, made into a ball with soap. The horses were taken into a barn, and the sheep's skin put upon their backs; during the administration of these medicines, half the usual quantity of water only was allowed them. They both returned to their duty in three weeks from the time they were taken in.

DIARRHŒA, OR LOOSENESS.

CAUSE.

THIS disease requires no description. Cold sweats, attended with coldness in the extremities, are dangerous symptoms.

Sudden check of perspiration, or violent cold from any cause, too quick a succession of strong physic, which, without immediate relief, terminates in death, or leaves the constitution and digestive powers feeble for life.

TREATMENT.

From 3 to 400 cases of diarrhœa, have come under my care. In cases where the disease appeared to be the result of a simple check of perspiration, or indigestion, the following ball has proved sufficient to stop it :

Barbadoes Aloes, five drams.
Opium, one dram and a half,
Grains of Paradise, in fine powder, one dram,
Treacle sufficient to form a ball.

In cases where the symptoms were extremely dangerous, I have had recourse to the following treatment, viz. frequent glysters of
starch,

starch, in the quantity of a pound, in three quarts of boiling water, in which four ounces of Gum Arabic had previously been dissolved, repeating it every four hours, and giving the following ball every six hours:

Take Gum Arabic, in fine powder, four drams,

Purified Opium, forty grains,

Fine Ginger, or Grains of Paradise, two drams,

Conserve of hips, sufficient to form the whole into a ball.

I HAVE never lost but one horse in a diarrhœa, in all my practice, and although I gave, in that instance, one of the above ball every four hours, and the last day, one every two hours, with double the quantity of Opium, they had not the least effect, the whole length of the intestines were excoriated and turned black; and the horse died in the most excruciating spasm.

This was a troop horse in the 11th Light Dragoons, the cause of the disease was inattention, in a Farrier, to the quantity of Calomel ordered by me to destroy worms; and the Dragoon giving the horse copiously of cold water from a pump, during its operation.

MALLENDERS

ARE too well known to require any description, farther than that it is a disease in the bend of the knee.

SALENDERS.

THIS disease is analagous to the former, affecting the bend of the hough. The general cause is want of cleanliness, and the reverse generally performs a cure. If that fail,

Take Mercurial Ointment, two ounces,

Spanish Flies, in fine powder, one dram,

Sublimate, ditto, half a dram ;

Mix them together in a mortar, and diligently rub in, with a warm hand, the size of a large horse-bean, on the part affected, every night and morning. The part should be perfectly cleaned before the ointment be applied.

MANGE.

MANGE.

THIS disease is so generally known, as to render a description useless. In the year 1796, soon after the 11th Dragoons disembarked, I discovered eight of the horses to have the mange. The first indication of cure was to get their skins perfectly clean, and afterwards to wash them well all over with a strong solution of salt in water, and when dry to apply the following Ointment :

Palm Oil, six pounds,

Sulphur Vivum, two pounds,

Oil of Turpentine half a pound,

to be formed into an Ointment in a large mortar ; all the parts affected were well rubbed with a sufficient quantity, with the hand, three successive days ; and after an interval of four days, the Ointment was washed off with warm water and soap, and every horse was perfectly cured.

WIND-

WINDGALLS.

WINDGALLS are puffy tumors in the legs, arising from too strong exercise; causing an enlargement or distention of the bursa mucosa; and, in the more advanced stage, communicate with the joints, are troublesome and hard to repel; in the incipient state the following is the best application I am at present acquainted with:

Take of the best Vinegar a quart,

Crude Sal Ammoniac, two ounces,

Sugar of Lead, one ounce,

Camphorated Spirits of Wine, four ounces.

First wet the parts well with the solution, and then apply a bandage, moistened with the same, moderately tight round the joint; taking care that there be no partial pressure from the bandage; the part should be kept constantly wet with the solution, by means of a sponge.

In the more advanced stage of this disease, the actual cautery is the only remedy that can be depended upon, with repeated gentle blisters, and rest. The above treatment suffices in all sprains, in and about the tendons and joints. The solution has repelled very obstinate thorough-pins, and bog-spavins; but the actual cautery is much more effectual, with repeated blisters and rest.

WOUNDS FROM THORNS.

THORNS in the feet, fetlocks, coronets, tendons, knees, points of the shoulders, bend of the houghs, &c. received in hunting, are accidents so common, that a description would be useless.

A Thorn in a tendon, whether the flexor, or extensor, *i. e.* in the front or bend of the knee, produces nearly the same symptoms, which are an inability to move the leg forward, attended with soreness and irritability in the part punctured. If in the bend of the hough, the horse will be able to bring his leg perfectly under his belly, but is afraid to throw any weight upon it, when required by moving the contrary leg. If in the heel, or back part of the frog, the symptoms vary but little from the last. If in the coronet, the most excruciating pain, and irritability, with inflammation, will easily be perceived.

To avoid tediousness I shall only mention a few cases of puncture by thorns, although many have occurred to me.

First, a horse the property of Edward Armitage, Esq. young and very valuable. He was hunted on the 22d February, 1804, by Mr. Smith, Mr. Armitage's friend; the next day the horse was lame, and I was sent for; the

fer-

servant supposed him to be strained in the fetlock ; however, I found it to be a thorn that had pierced the coronet, with the appearance of a puncture only. The inflammation ran very high, and I ordered a poultice to be applied, not being able to discover the thorn. Next morning I pared away as much of the hoof as allowed me to come at the head of the thorn, which I extracted with the point of my scalpel, 3-4ths of an inch long. I then ordered the part to be fomented, and a poultice applied twice a day, and a few drops of the following anodyne to be dropped into the aperture twice a day, viz. Purified Opium two drams, hot Water one ounce ; this being continued two days, the horse was able to walk, and he became perfectly found in eight days.

OBSERVATIONS.

The thorn punctured the coronet in the direction between the sensible and insensible laminae, inclining towards the sensible part of the foot. It is worth remarking, that a thorn running in the above-mentioned direction (when improperly treated) five times out of ten terminates in a quitter, and requires a much nicer treatment than Farriers are accustomed to use, to prevent a false quarter ; and more especially as they are invariably in the habit of cutting the hoof from the coronet to what they term the bottom of the wound, which cannot fail of producing a false quarter, or an ugly seam down the hoof, resembling a false quarter ; and this is unavoidably the case, if too free an use be made of the knife, in dividing the coronary ring, which from its peculiar texture, has the disposition to unite without an interposition of horny matter. Hot Oils, Tinctures, Balfams, Acids, and all hot applications are to be avoided ; and fomentations and poultices to be employed before, and after the thorn is extracted, during the slightest degree of inflammation ; but when the inflam-

mation

mation has subsided, and where there appears an indolence in the skin about the punctured part, and little disposition to heal, I have applied the actual cautery to great advantage, and which is, at all times, a better application, particularly in cases of punctures into joints, than any Balsam, Tincture, or the like; as the former may be depended upon, while the latter is uncertain. The actual cautery should be applied only to the external surface of the white and indolent skin about the wound, which ought not to be seared deeper than the thickness of the finest writing paper at a time; and repeated once in 24 or 36 hours, till the union of the skin be complete. Out of 50 or 60 cases of this kind, when it has been necessary to stop the discharge, I have been able to accomplish it, without difficulty, in 3 days. If the opening be into a joint, and of any considerable size, whether from thorns, nails, or any other instrument, the sooner the hot iron is applied to the lips of the divided skin, the better to prevent a discharge of synovia, &c.

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